

APPENDIX B

DETAILED PROJECT COST ESTIMATES

| Project ID | Length (ft) | Diameter (in) or Facility Type | Construction Cost | Mark-up Costs | Capital Project Cost |
|-----------------|----------------|--------------------------------------|----------------------|------------------|-------------------------|
| PDLA - A | | | | | |
| Project AAAA | 900 | 24 | \$218,072 | \$198,428 | \$416,500 |
| Project AAA | 550 | 36 | \$150,293 | \$139,241 | \$289,534 |
| Project AC | 1000 & 275 | 36 & 18 | \$561,078 | \$431,835 | \$992,913 |
| Project AFA | 2000 | Channel | \$26,837 | \$64,771 | \$91,608 |
| Project AFB | 3600 | Channel | \$66,071 | \$97,093 | \$163,164 |
| | | | | | \$1,953,719 |
| PDLA - B | | | | | |
| Project B | 3000 | Channel | \$1,178,489 | \$952,728 | \$2,131,218 |
| Project BB-1 | 1100 | 18 | \$176,840 | \$158,793 | \$335,632 |
| Project BB-2 | 1700 | 36 | \$413,663 | \$336,770 | \$750,433 |
| Project BCA | 2900 | 24 | \$590,376 | \$478,237 | \$1,068,613 |
| Project BCB | 925 | 30 | \$256,921 | \$211,175 | \$468,096 |
| Project BCC | 925 | 36 | \$279,735 | \$232,244 | \$511,979 |
| Project BFA | 1600 | 42 | \$528,155 | \$435,518 | \$963,673 |
| Project BFB-U | 3800 | Channel | \$68,367 | \$69,853 | \$138,220 |
| Project BFB-L | 800 | 48 | \$255,297 | \$236,040 | \$491,336 |
| Project BF1 | N/A | Sed Basin | \$223,827 | \$189,156 | \$412,983 |
| Project BJ-1 | 270 & N/A | RCB & Sed Basin | \$276,784 | \$223,735 | \$500,519 |
| Project BJB | N/A | Outlet Structure | \$77,952 | \$75,080 | \$153,032 |
| Project BL-U | 800 | 39 | \$198,775 | \$185,734 | \$384,509 |
| Project BL-L | 20 & 125 | 90 & Bridge | \$652,887 | \$1,163,214 | \$1,816,101 |
| Project BM | 260 | RCB | \$127,624 | \$76,453 | \$204,077 |
| Project BNB | 3600 | 84 | \$1,876,136 | \$1,546,690 | \$3,422,826 |
| Project BN | 3600 | Channel | \$170,056 | \$186,617 | \$356,673 |
| Project BP | 28 & 172 | RCB | \$191,371 | \$133,963 | \$325,334 |
| Project BQ | 800 | Spot Enhance | \$67,164 | \$64,191 | \$131,355 |
| Project BR | 150 | 66 | \$94,281 | \$86,492 | \$180,773 |
| | | | | | \$14,747,382 |
| PDLA - C | | | | | |
| Project C1 | 100 | BRIDGE | \$1,667,416 | \$1,851,100 | \$3,518,516 |
| Project C2 | 90 | RCB | \$259,816 | \$467,915 | \$727,730 |
| Project CA | 600 | Concrete Channel | \$191,064 | \$338,338 | \$529,402 |
| | | | | | \$4,775,649 |
| PDLA - D | | | | | |
| Project DBA | 360 | 30 | \$83,448 | \$83,767 | \$167,215 |
| Project DBB | 720 | 30 | \$227,889 | \$201,218 | \$429,108 |
| Project DFA | N/A | Treatment System | \$109,404 | \$147,019 | \$256,423 |
| Project DQB | 2500 | 36 | \$402,175 | \$343,667 | \$745,842 |
| Project DH | 3111 | Spot Enhance | \$114,417 | \$118,395 | \$232,812 |
| Project DZ | 100 | RCB (2) | \$415,627 | \$226,436 | \$642,063 |
| | | | | | \$2,473,462 |
| | | | | | \$23,950,212 |



City of Carlsbad, Drainage Master Plan

| | |
|--------------------------------|------------------|
| Project Number:: | 128290 |
| Client:: | City of Carlsbad |
| Estimator(s):: | SB / DG |
| Estimating Office:: | Walnut Creek |
| Estimate Issue Number:: | 01 |
| Estimate Original Issue Date:: | 3/14/2006 |
| Estimate Revision Number:: | 04 |
| Estimate Revision Date:: | 6/27/2008 |
| BC Project Manager:: | Chris Herencia |
| Estimate QA/QC Reviewer:: | Butch Matthews |
| Estimate QA/QC Date:: | 6/27/2008 |

PROJECT LOCATION/ITEM DESCRIPTION

Project AAA - Located in Basin A

| Item | Item Description | Quantity | Unit | Labor \$/Unit | Labor Amount | Materials \$/Unit | Materials Amount | Equip \$/Unit | Equip Amount | Total \$/Unit | Subs Amount | Other Amount | Grand Total |
|---|---|----------|------|---------------|---------------|-------------------|------------------|---------------|-------------------|------------------|---------------|---------------|-------------------|
| Project AAA | | | | | | | | | | | | | |
| 01 - GENERAL REQUIREMENTS | | | | | | | | | | | | | |
| 01200 - General equipment rental | | | | | | | | | | | | | |
| | Trench box, 7200 lbs, 6'x 20' | 6 | Day | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$141.60 | \$849.60 | \$141.6 / Day | \$0.00 | \$0.00 | \$849.60 |
| | Trench Plates allowance | 1 | Mo | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$900.00 | \$900.00 | \$900 / Mo | \$0.00 | \$0.00 | \$900.00 |
| | GENERAL REQUIREMENTS Total | | | | \$0.00 | | \$0.00 | | \$1,749.60 | | \$0.00 | \$0.00 | \$1,749.60 |
| 02 - SITE CONSTRUCTION | | | | | | | | | | | | | |
| 02020 - Underground marking tape | | | | | | | | | | | | | |
| | Underground tape, detectable aluminum, 2" | 6 | Clf | \$2.34 | \$12.87 | \$3.06 | \$16.83 | \$0.00 | \$0.00 | \$5.4 / Clf | \$0.00 | \$0.00 | \$29.70 |
| 02060 - Site demolition | | | | | | | | | | | | | |
| | Site dml, no hauling, pavement removal, bit, 4" to 6" thick | 427 | Sqyd | \$5.29 | \$2,258.83 | \$0.00 | \$0.00 | \$3.49 | \$1,490.23 | \$8.78 / Sqyd | \$0.00 | \$0.00 | \$3,749.06 |
| | Asphalt disposal - hauling and disposal fee, 4" thick | 427 | Sqyd | \$1.00 | \$427.00 | \$4.70 | \$2,006.90 | \$1.32 | \$563.64 | \$7.02 / Sqyd | \$0.00 | \$0.00 | \$2,997.54 |
| 02170 - Saw cutting | | | | | | | | | | | | | |
| | Saw cutting, asphalt, up to 3" deep | 1112 | Lnft | \$0.48 | \$533.76 | \$0.07 | \$77.84 | \$0.26 | \$289.12 | \$0.81 / Lnft | \$0.00 | \$0.00 | \$900.72 |
| | Saw cutting, asphalt, after 3" deep; each addl inch of depth | 1112 | Lnft | \$0.82 | \$911.84 | \$0.30 | \$333.60 | \$0.44 | \$489.28 | \$1.56 / Lnft | \$0.00 | \$0.00 | \$1,734.72 |
| 02310 - Fine grade | | | | | | | | | | | | | |
| | Fine grade under asphalt | 427 | Sqyd | \$0.26 | \$111.02 | \$0.00 | \$0.00 | \$0.21 | \$89.67 | \$0.47 / Sqyd | \$0.00 | \$0.00 | \$200.69 |
| 02320 - Backfill | | | | | | | | | | | | | |
| | Backfill, dozer backfilling, trench, no compaction | 853 | Cuyd | \$0.80 | \$682.40 | \$0.00 | \$0.00 | \$1.28 | \$1,091.84 | \$2.08 / Cuyd | \$0.00 | \$0.00 | \$1,774.24 |
| 02340 - Bedding | | | | | | | | | | | | | |
| | Bedding, crushed stone 3/4" to 1/2" | 143 | Cuyd | \$8.47 | \$1,211.21 | \$32.03 | \$4,580.29 | \$1.89 | \$270.27 | \$42.39 / Cuyd | \$0.00 | \$0.00 | \$6,061.77 |
| 02360 - Compaction | | | | | | | | | | | | | |
| | Backfill Compaction, walk behind, vibrating roller 24" W, 6" lifts, 2 | 853 | Cuyd | \$1.72 | \$1,467.16 | \$0.00 | \$0.00 | \$0.41 | \$349.73 | \$2.13 / Cuyd | \$0.00 | \$0.00 | \$1,816.89 |
| | Subgrade Compaction, rammer tamper, 6" to 11", 4" lifts, 2 passes | 61 | Cuyd | \$2.93 | \$179.02 | \$0.00 | \$0.00 | \$0.78 | \$47.66 | \$3.71 / Cuyd | \$0.00 | \$0.00 | \$226.68 |
| | Bedding Compaction, rammer tamper, 6" to 11", 4" lifts, 2 passes | 853 | Cuyd | \$2.93 | \$2,499.29 | \$0.00 | \$0.00 | \$0.78 | \$665.34 | \$3.71 / Cuyd | \$0.00 | \$0.00 | \$3,164.63 |
| 02450 - Excavating, trench | | | | | | | | | | | | | |
| | Excavate trench, cont ftg, no sht or dewtrg, 4'-6' D, 1-1/2 CY hyd bac | 1140 | Cuyd | \$1.95 | \$2,223.00 | \$0.00 | \$0.00 | \$1.42 | \$1,618.80 | \$3.37 / Cuyd | \$0.00 | \$0.00 | \$3,841.80 |
| 02460 - Hauling | | | | | | | | | | | | | |
| | Hauling, LCY, no loading, 12 c.y. dump truck, 20 MI RT, 0.4 lds/hr | 376 | Cuyd | \$7.18 | \$2,701.12 | \$3.00 | \$1,128.60 | \$15.45 | \$5,810.89 | \$25.63 / Cuyd | \$0.00 | \$0.00 | \$9,640.61 |
| | Loading Trucks, F.E. Loader, 3 C.Y.. | 376 | Cuyd | \$0.74 | \$278.39 | \$0.00 | \$0.00 | \$1.24 | \$466.49 | \$1.98 / Cuyd | \$0.00 | \$0.00 | \$744.88 |
| | Disposal fee | 19 | Trk | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$105 / Trk | \$0.00 | \$1,975.05 | \$1,975.05 |
| 02490 - Erosion control | | | | | | | | | | | | | |
| | Erosion control allowance: small site: silt fence, bio bags, no special | 1 | Lsum | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$1536 / Lsum | \$0.00 | \$1,536.00 | \$1,536.00 |
| 02570 - Catch basins or manholes | | | | | | | | | | | | | |
| | Cleanout | 1 | Each | \$1,019.00 | \$1,019.00 | \$1,560.00 | \$1,560.00 | \$249.00 | \$249.00 | \$2828 / Each | \$0.00 | \$0.00 | \$2,828.00 |
| | Catch bsns or manholes, curb inlet FR, grate, large 24"x36" heavy | 4 | Each | \$602.88 | \$2,411.52 | \$472.04 | \$1,888.16 | \$0.00 | \$0.00 | \$1074.92 / Each | \$0.00 | \$0.00 | \$4,299.68 |
| 02600 - Base course | | | | | | | | | | | | | |
| | Base course, large areas, crushed 3/4" stone, compacted to 9" deep | 427 | Sqyd | \$0.80 | \$341.60 | \$8.06 | \$3,441.62 | \$1.02 | \$435.54 | \$9.88 / Sqyd | \$0.00 | \$0.00 | \$4,218.76 |

| Item | Item Description | Quantity | Unit | Labor \$/Unit | Labor Amount | Materials \$/Unit | Materials Amount | Equip \$/Unit | Equip Amount | Total \$/Unit | Subs Amount | Other Amount | Grand Total |
|------------------------------------|---|------------|-----------|---------------|--------------------|-------------------|--------------------|---------------|--------------------|-----------------|---------------|-------------------|---------------------|
| 02610 - Asphalt concrete pavement | | | | | | | | | | | | | |
| | Asphaltic conc pavement, pavement replacement over trench, 4" thick | 427 | Sqyd | \$35.00 | \$14,945.00 | \$18.00 | \$7,686.00 | \$2.98 | \$1,272.46 | \$55.98 / Sqyd | \$0.00 | \$0.00 | \$23,903.46 |
| 02640 - Lines on pav't | | | | | | | | | | | | | |
| | Lines on pvmt, acrylic waterborne, white or yellow, 4" wide | 550 | Lnft | \$0.12 | \$66.00 | \$0.17 | \$93.50 | \$0.08 | \$44.00 | \$0.37 / Lnft | \$0.00 | \$0.00 | \$203.50 |
| 02840 - Landscaping | | | | | | | | | | | | | |
| | Traffic Control Allowance: 2 flaggers, 15' pipe/hr | 1 | Lsum | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$4878 / Lsum | \$0.00 | \$4,878.00 | \$4,878.00 |
| 02900 - Pot Holing | | | | | | | | | | | | | |
| | Pot Holing - pipe lines: 2 per 100' | 11 | Each | \$250.00 | \$2,750.00 | \$0.00 | \$0.00 | \$35.00 | \$385.00 | \$285 / Each | \$0.00 | \$0.00 | \$3,135.00 |
| | SITE CONSTRUCTION Total | | | | \$37,030.03 | | \$22,813.34 | | \$15,628.96 | | \$0.00 | \$8,389.05 | \$83,861.38 |
| 15 - MECHANICAL | | | | | | | | | | | | | |
| 15090 - Pipe, drng&sewage, concret | | | | | | | | | | | | | |
| | Piping, drainage & sewage, RCP, class 3, no gaskets, 36" dia | 550 | Lnft | \$39.70 | \$21,835.00 | \$73.00 | \$40,150.00 | \$3.94 | \$2,167.00 | \$116.64 / Lnft | \$0.00 | \$0.00 | \$64,152.00 |
| | Piping, water dist, conc pipe, gasket, 36" dia | 55 | Each | \$3.14 | \$172.70 | \$6.50 | \$357.50 | \$0.00 | \$0.00 | \$9.64 / Each | \$0.00 | \$0.00 | \$530.20 |
| | MECHANICAL Total | | | | \$22,007.70 | | \$40,507.50 | | \$2,167.00 | | \$0.00 | \$0.00 | \$64,682.20 |
| | Project AAA Total | 550 | LF | | \$59,037.73 | | \$63,320.84 | | \$19,545.56 | | \$0.00 | \$8,389.05 | \$150,293.18 |
| Grand Total | | | | | \$59,037.73 | | \$63,320.84 | | \$19,545.56 | | \$0.00 | \$8,389.05 | \$150,293.18 |

| Category | Percent | Amount |
|-------------------------------------|---------|------------------|
| Labor | 39.28% | \$59,038 |
| Material | 42.13% | \$63,321 |
| Equipment | 13.00% | \$19,546 |
| Subcontractor | 0.00% | \$0 |
| Other | 5.58% | \$8,389 |
| Net Costs | | \$150,293 |
| Labor Mark-up | 18.00% | \$10,627 |
| Material Mark-up | 15.00% | \$9,498 |
| Subcontractor Mark-up | 5.00% | \$0 |
| Equipment Mark-up | 15.00% | \$2,932 |
| Sales tax (material) | 7.75% | \$4,907 |
| Sales tax (equipment) | 7.75% | \$1,515 |
| Material Shipping & Handling | 2.50% | \$1,583 |
| Worker's Travel/Subsistence | 0.10% | \$59 |
| Subtotal | | \$181,414 |
| Contractor General Conditions | 12.00% | \$21,770 |
| Subtotal | | \$203,184 |
| Earthquake Insurance | 0.10% | \$203 |
| Subtotal | | \$203,387 |
| Construction Contingency | 25.00% | \$50,847 |
| Subtotal | | \$254,234 |
| Bldg Risk, Liability Auto Ins. | 2.00% | \$5,085 |
| Subtotal | | \$259,318 |
| Performance Bond | 1.00% | \$2,593 |
| Payment Bond | 1.00% | \$2,593 |
| Subtotal | | \$264,505 |
| Engineering Fee | 10.00% | \$15,029 |
| Environmental Permitting (Lump Sum) | - | \$10,000 |
| Total Estimate | | \$289,534 |



City of Carlsbad, Drainage Master Plan

| | |
|--------------------------------|------------------|
| Project Number:: | 128290 |
| Client:: | City of Carlsbad |
| Estimator(s):: | JW / DG |
| Estimating Office:: | Walnut Creek |
| Estimate Issue Number:: | 01 |
| Estimate Original Issue Date:: | 3/14/2006 |
| Estimate Revision Number:: | 04 |
| Estimate Revision Date:: | 6/27/2008 |
| BC Project Manager:: | Chris Herencia |
| Estimate QA/QC Reviewer:: | Butch Matthews |
| Estimate QA/QC Date:: | 6/27/2008 |

PROJECT LOCATION / PROCESS AREA

Project AAAA - Located in Basin A

| Item | Item Description | Quantity | Unit | Labor \$/Unit | Labor Amount | Materials \$/Unit | Materials Amount | Equip \$/Unit | Equip Amount | Total \$/Unit | Subs Amount | Other Amount | Grand Total |
|---|---|----------|------|---------------|---------------|-------------------|------------------|---------------|-------------------|------------------|---------------|---------------|-------------------|
| Project AAAA | | | | | | | | | | | | | |
| 01 - GENERAL REQUIREMENTS | | | | | | | | | | | | | |
| | Trench box, 7200 lbs, 6'x 20' | 12 | Day | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$141.60 | \$1,699.20 | \$141.6 / Day | \$0.00 | \$0.00 | \$1,699.20 |
| | Trench Plates allowance | 1 | Mo | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$900.00 | \$900.00 | \$900 / Mo | \$0.00 | \$0.00 | \$900.00 |
| | GENERAL REQUIREMENTS Total | | | | \$0.00 | | \$0.00 | | \$2,599.20 | | \$0.00 | \$0.00 | \$2,599.20 |
| 02 - SITE CONSTRUCTION | | | | | | | | | | | | | |
| 02020 - Underground marking tape | | | | | | | | | | | | | |
| | Underground tape, detectable aluminum, 2" | 9 | Clf | \$2.34 | \$21.06 | \$3.06 | \$27.54 | \$0.00 | \$0.00 | \$5.4 / Clf | \$0.00 | \$0.00 | \$48.60 |
| 02060 - Site demolition | | | | | | | | | | | | | |
| | Site dml, no hauling, pavement removal, bit, 4" to 6" thick | 600 | Sqyd | \$5.29 | \$3,174.00 | \$0.00 | \$0.00 | \$3.49 | \$2,094.00 | \$8.78 / Sqyd | \$0.00 | \$0.00 | \$5,268.00 |
| | Asphalt disposal - hauling and disposal fee, 4" thick | 600 | Sqyd | \$1.00 | \$600.00 | \$4.70 | \$2,820.00 | \$1.32 | \$792.00 | \$7.02 / Sqyd | \$0.00 | \$0.00 | \$4,212.00 |
| 02170 - Saw cutting | | | | | | | | | | | | | |
| | Saw cutting, asphalt, up to 3" deep | 1812 | Lnft | \$0.48 | \$869.76 | \$0.07 | \$126.84 | \$0.26 | \$471.12 | \$0.81 / Lnft | \$0.00 | \$0.00 | \$1,467.72 |
| | Saw cutting, asphalt, after 3" deep; each addl inch of depth | 1812 | Lnft | \$0.82 | \$1,485.84 | \$0.30 | \$543.60 | \$0.44 | \$797.28 | \$1.56 / Lnft | \$0.00 | \$0.00 | \$2,826.72 |
| 02310 - Fine grade | | | | | | | | | | | | | |
| | Fine grade under asphalt | 600 | Sqyd | \$0.26 | \$156.00 | \$0.00 | \$0.00 | \$0.21 | \$126.00 | \$0.47 / Sqyd | \$0.00 | \$0.00 | \$282.00 |
| 02340 - Bedding | | | | | | | | | | | | | |
| | Bedding, crushed stone 3/4" to 1/2" | 421 | Cuyd | \$8.47 | \$3,565.02 | \$32.03 | \$13,481.43 | \$1.89 | \$795.50 | \$42.39 / Cuyd | \$0.00 | \$0.00 | \$17,841.95 |
| | Import backfill, crushed stone 3/4" to 1/2" | 444 | Cuyd | \$8.47 | \$3,764.07 | \$32.03 | \$14,234.13 | \$1.89 | \$839.92 | \$42.39 / Cuyd | \$0.00 | \$0.00 | \$18,838.12 |
| 02360 - Compaction | | | | | | | | | | | | | |
| | Subgrade Compaction, rammer tamper, 6" to 11", 4" lifts, 2 passes | 67 | Cuyd | \$2.93 | \$195.43 | \$0.00 | \$0.00 | \$0.78 | \$52.03 | \$3.71 / Cuyd | \$0.00 | \$0.00 | \$247.46 |
| | Bedding Compaction, rammer tamper, 6" to 11", 4" lifts, 2 passes | 362 | Cuyd | \$2.93 | \$1,060.66 | \$0.00 | \$0.00 | \$0.78 | \$282.36 | \$3.71 / Cuyd | \$0.00 | \$0.00 | \$1,343.02 |
| 02450 - Excavating, trench | | | | | | | | | | | | | |
| | Excavate trench, cont ftg, no sht or dewtrg, 4'-6' D, 1-1/2 CY hyd bac | 867 | Cuyd | \$1.95 | \$1,690.65 | \$0.00 | \$0.00 | \$1.42 | \$1,231.14 | \$3.37 / Cuyd | \$0.00 | \$0.00 | \$2,921.79 |
| 02460 - Hauling | | | | | | | | | | | | | |
| | Hauling, LCY, no loading, 12 c.y. dump truck, 20 MI | 867 | Cuyd | \$7.18 | \$6,225.06 | \$3.00 | \$2,601.00 | \$15.45 | \$13,392.00 | \$25.63 / Cuyd | \$0.00 | \$0.00 | \$22,218.06 |
| | Loading Trucks, F.E. Loader, 3 C.Y.. | 867 | Cuyd | \$0.74 | \$641.58 | \$0.00 | \$0.00 | \$1.24 | \$1,075.08 | \$1.98 / Cuyd | \$0.00 | \$0.00 | \$1,716.66 |
| | Disposal fee | 43 | Trk | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$105 / Trk | \$0.00 | \$4,551.75 | \$4,551.75 |
| 02490 - Erosion control | | | | | | | | | | | | | |
| | Erosion control allowance: small site: silt fence, bio bags, no special | 1 | Lsum | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$1536 / Lsum | \$0.00 | \$1,536.00 | \$1,536.00 |
| 02570 - Catch basins or manholes | | | | | | | | | | | | | |
| | CB or manholes, conc, precast, 4' ID, 6' deep | 3 | Each | \$549.75 | \$1,649.25 | \$1,050.00 | \$3,150.00 | \$148.32 | \$444.96 | \$1748.07 / Each | \$0.00 | \$0.00 | \$5,244.21 |
| | Junction structure manholes, concrete, precast, 8' I.D., 8' deep, | 1 | Each | \$1,587.50 | \$1,587.50 | \$3,133.31 | \$3,133.31 | \$354.40 | \$354.40 | \$5075.21 / Each | \$0.00 | \$0.00 | \$5,075.21 |
| | CB or manholes, conc, slab tops, precast, 8" thick, 4' dia | 3 | Each | \$158.75 | \$476.25 | \$201.00 | \$603.00 | \$35.44 | \$106.32 | \$395.19 / Each | \$0.00 | \$0.00 | \$1,185.57 |
| | Cleanout | 2 | Each | \$1,019.00 | \$2,038.00 | \$1,560.00 | \$3,120.00 | \$249.00 | \$498.00 | \$2828 / Each | \$0.00 | \$0.00 | \$5,656.00 |
| | CB or manholes, conc, slab tops, precast, 8" thick, 8' dia | 1 | Each | \$181.43 | \$181.43 | \$575.00 | \$575.00 | \$40.50 | \$40.50 | \$796.93 / Each | \$0.00 | \$0.00 | \$796.93 |
| | Catch bsns or manholes, frs and covs, hvy traffic, 24" diam, 400 lb. | 3 | Each | \$162.82 | \$488.46 | \$260.00 | \$780.00 | \$36.35 | \$109.05 | \$459.17 / Each | \$0.00 | \$0.00 | \$1,377.51 |
| | Catch bsns or manholes, frs and covs, hvy traffic, 36" diam, 1150 lb. | 1 | Each | \$423.33 | \$423.33 | \$860.00 | \$860.00 | \$94.51 | \$94.51 | \$1377.84 / Each | \$0.00 | \$0.00 | \$1,377.84 |
| | CB or manholes, inverts, single channel brick, concrete | 3 | Each | \$144.00 | \$432.00 | \$100.00 | \$300.00 | \$0.00 | \$0.00 | \$244 / Each | \$0.00 | \$0.00 | \$732.00 |
| | CB or manholes, inverts, triple channel, conc | 1 | Each | \$240.32 | \$240.32 | \$134.00 | \$134.00 | \$0.00 | \$0.00 | \$374.32 / Each | \$0.00 | \$0.00 | \$374.32 |
| | CB/manholes, steps, heavyweight cast iron, 12" x 10-1/2", for all con | 6 | Each | \$9.66 | \$57.96 | \$23.00 | \$138.00 | \$0.00 | \$0.00 | \$32.66 / Each | \$0.00 | \$0.00 | \$195.96 |

| Item | Item Description | Quantity | Unit | Labor \$/Unit | Labor Amount | Materials \$/Unit | Materials Amount | Equip \$/Unit | Equip Amount | Total \$/Unit | Subs Amount | Other Amount | Grand Total |
|---|---|----------|------|---------------|--------------|-------------------|------------------|---------------|--------------|----------------|-------------|--------------|--------------|
| <i>02600 - Base course</i> | | | | | | | | | | | | | |
| | Base course, large areas, crushed 3/4" stone, compacted to 9" deep | 600 | Sqyd | \$0.80 | \$480.00 | \$8.06 | \$4,836.00 | \$1.02 | \$612.00 | \$9.88 / Sqyd | \$0.00 | \$0.00 | \$5,928.00 |
| <i>02610 - Asphalt concrete pavement</i> | | | | | | | | | | | | | |
| | Asphaltic conc pavement, pavement replacement over trench, 4" thick | 600 | Sqyd | \$35.00 | \$21,000.00 | \$18.00 | \$10,800.00 | \$2.98 | \$1,788.00 | \$55.98 / Sqyd | \$0.00 | \$0.00 | \$33,588.00 |
| <i>02640 - Lines on pav't</i> | | | | | | | | | | | | | |
| | Lines on pvmt, acrylic waterborne, white or yellow, 4" wide | 900 | Lnft | \$0.12 | \$108.00 | \$0.17 | \$153.00 | \$0.08 | \$72.00 | \$0.37 / Lnft | \$0.00 | \$0.00 | \$333.00 |
| <i>02840 - Landscaping</i> | | | | | | | | | | | | | |
| | Traffic Control Allowance: 2 flaggers, 15' pipe/hr | 1 | Lsum | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$4878 / Lsum | \$0.00 | \$4,878.00 | \$4,878.00 |
| <i>02900 - Pot Holing</i> | | | | | | | | | | | | | |
| | Pot Holing - pipe lines: 2 per 100' | 18 | Each | \$250.00 | \$4,500.00 | \$0.00 | \$0.00 | \$35.00 | \$630.00 | \$285 / Each | \$0.00 | \$0.00 | \$5,130.00 |
| | <i>SITE CONSTRUCTION Total</i> | | | | \$57,111.63 | | \$62,416.85 | | \$26,698.16 | | \$0.00 | \$10,965.75 | \$157,192.39 |
| <i>03 - CONCRETE</i> | | | | | | | | | | | | | |
| <i>03330 - Patching concrete</i> | | | | | | | | | | | | | |
| | Pre-cast concrete wall penetration, non-shrink grout, 24" hole | 8 | Each | \$75.00 | \$600.00 | \$108.00 | \$864.00 | \$0.00 | \$0.00 | \$183 / Each | \$0.00 | \$0.00 | \$1,464.00 |
| | <i>CONCRETE Total</i> | | | | \$600.00 | | \$864.00 | | \$0.00 | | \$0.00 | \$0.00 | \$1,464.00 |
| <i>15 - MECHANICAL</i> | | | | | | | | | | | | | |
| <i>15090 - Pipe, drng&sewage, concret</i> | | | | | | | | | | | | | |
| | Piping, drainage & sewage, RCP, class 3, no gaskets, 24" dia | 900 | Lnft | \$24.50 | \$22,050.00 | \$35.00 | \$31,500.00 | \$2.84 | \$2,556.00 | \$62.34 / Lnft | \$0.00 | \$0.00 | \$56,106.00 |
| | Piping, water dist, conc pipe, gasket, 24" dia | 90 | Each | \$3.14 | \$282.60 | \$4.75 | \$427.50 | \$0.00 | \$0.00 | \$7.89 / Each | \$0.00 | \$0.00 | \$710.10 |
| | <i>MECHANICAL Total</i> | | | | \$22,332.60 | | \$31,927.50 | | \$2,556.00 | | \$0.00 | \$0.00 | \$56,816.10 |
| | <i>Project AAAA Total</i> | | | | \$80,044.23 | | \$95,208.35 | | \$31,853.36 | | \$0.00 | \$10,965.75 | \$218,071.69 |
| | <i>Grand Total</i> | | | | \$80,044.23 | | \$95,208.35 | | \$31,853.36 | | \$0.00 | \$10,965.75 | \$218,071.69 |

| Category | Percent | Amount |
|-------------------------------------|---------|------------------|
| Labor | 36.71% | \$80,044 |
| Material | 43.66% | \$95,208 |
| Equipment | 14.61% | \$31,853 |
| Subcontractor | 0.00% | \$0 |
| Other | 5.03% | \$10,966 |
| Net Costs | | \$218,072 |
| Labor Mark-up | 18.00% | \$14,408 |
| Material Mark-up | 15.00% | \$14,281 |
| Subcontractor Mark-up | 5.00% | \$0 |
| Equipment Mark-up | 15.00% | \$4,778 |
| Sales tax (material) | 7.75% | \$7,379 |
| Sales tax (equipment) | 7.75% | \$2,469 |
| Material Shipping & Handling | 2.50% | \$2,380 |
| Worker's Travel/Subsistence | 0.10% | \$80 |
| Subtotal | | \$263,846 |
| Contractor General Conditions | 12.00% | \$31,662 |
| Subtotal | | \$295,508 |
| Earthquake Insurance | 0.10% | \$296 |
| Subtotal | | \$295,804 |
| Construction Contingency | 25.00% | \$73,951 |
| Subtotal | | \$369,754 |
| Bldg Risk, Liability Auto Ins. | 2.00% | \$7,395 |
| Subtotal | | \$377,150 |
| Performance Bond | 1.00% | \$3,771 |
| Payment Bond | 1.00% | \$3,771 |
| Subtotal | | \$384,692 |
| Engineering Fee | 10.00% | \$21,807 |
| Environmental Permitting (Lump Sum) | - | \$10,000 |
| Total Estimate | | \$416,500 |



City of Carlsbad, Drainage Master Plan

| | |
|--------------------------------|------------------|
| Project Number:: | 128290 |
| Client:: | City of Carlsbad |
| Estimator(s):: | JW / DG |
| Estimating Office:: | Walnut Creek |
| Estimate Issue Number:: | 01 |
| Estimate Original Issue Date:: | 3/14/2006 |
| Estimate Revision Number:: | 04 |
| Estimate Revision Date:: | 6/27/2008 |
| BC Project Manager:: | Chris Herencia |
| Estimate QA/QC Reviewer:: | Butch Matthews |
| Estimate QA/QC Date:: | 6/27/2008 |

PROJECT LOCATION / PROCESS AREA

Project AC - Located in Basin A

| Item | Item Description | Quantity | Unit | Labor \$/Unit | Labor Amount | Materials \$/Unit | Materials Amount | Equip \$/Unit | Equip Amount | Total \$/Unit | Subs Amount | Other Amount | Grand Total |
|----------------------------------|---|----------|------|---------------|--------------|-------------------|------------------|---------------|--------------|------------------|-------------|--------------|-------------|
| Project AC | | | | | | | | | | | | | |
| 01 - GENERAL REQUIREMENTS | | | | | | | | | | | | | |
| 01200 - General equipment rental | | | | | | | | | | | | | |
| | Trench box, 9500 lbs, 8'x 20' | 20 | Day | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$240.00 | \$4,800.00 | \$240 / Day | \$0.00 | \$0.00 | \$4,800.00 |
| | GENERAL REQUIREMENTS Total | | | | \$0.00 | | \$0.00 | | \$4,800.00 | | \$0.00 | \$0.00 | \$4,800.00 |
| 02 - SITE CONSTRUCTION | | | | | | | | | | | | | |
| 02020 - Underground marking tape | | | | | | | | | | | | | |
| | Underground tape, detectable aluminum, 2" | 13 | Clf | \$2.34 | \$29.84 | \$3.06 | \$39.02 | \$0.00 | \$0.00 | \$5.4 / Clf | \$0.00 | \$0.00 | \$68.85 |
| 02060 - Site demolition | | | | | | | | | | | | | |
| | Site dml, no hauling, pavement removal, bit, 4" to 6" thick | 436 | Sqyd | \$5.29 | \$2,305.54 | \$0.00 | \$0.00 | \$3.49 | \$1,521.05 | \$8.78 / Sqyd | \$0.00 | \$0.00 | \$3,826.59 |
| | Asphalt disposal - hauling and disposal fee, 4" thick | 436 | Sqyd | \$1.00 | \$435.83 | \$4.70 | \$2,048.40 | \$1.32 | \$575.30 | \$7.02 / Sqyd | \$0.00 | \$0.00 | \$3,059.53 |
| 02170 - Saw cutting | | | | | | | | | | | | | |
| | Saw cutting, asphalt, up to 3" deep | 2280 | Lnft | \$0.48 | \$1,094.40 | \$0.07 | \$159.60 | \$0.26 | \$592.80 | \$0.81 / Lnft | \$0.00 | \$0.00 | \$1,846.80 |
| | Saw cutting, asphalt, after 3" deep; each addl inch of depth | 2280 | Lnft | \$0.82 | \$1,869.60 | \$0.30 | \$684.00 | \$0.44 | \$1,003.20 | \$1.56 / Lnft | \$0.00 | \$0.00 | \$3,556.80 |
| 02320 - Backfill | | | | | | | | | | | | | |
| | Backfill, dozer backfilling, trench, up to 300' haul, no compaction | 1568 | Cuyd | \$0.80 | \$1,254.32 | \$0.00 | \$0.00 | \$1.28 | \$2,006.91 | \$2.08 / Cuyd | \$0.00 | \$0.00 | \$3,261.23 |
| | Backfill, dozer backfilling, trench, up to 300' haul, no compaction, | 391 | Cuyd | \$0.80 | \$312.80 | \$0.00 | \$0.00 | \$1.28 | \$500.48 | \$2.08 / Cuyd | \$0.00 | \$0.00 | \$813.28 |
| 02340 - Bedding | | | | | | | | | | | | | |
| | Bedding, crushed stone 3/4" to 1/2" | 962 | Cuyd | \$8.47 | \$8,146.45 | \$32.03 | \$30,806.45 | \$1.89 | \$1,817.80 | \$42.39 / Cuyd | \$0.00 | \$0.00 | \$40,770.70 |
| 02360 - Compaction | | | | | | | | | | | | | |
| | Compaction, trench, walk behind, vib. plate, bedding | 827 | Cuyd | \$1.90 | \$1,571.49 | \$0.00 | \$0.00 | \$0.51 | \$421.82 | \$2.41 / Cuyd | \$0.00 | \$0.00 | \$1,993.31 |
| | Compaction, trench, walk behind, vib. plate, subgrade | 129 | Cuyd | \$1.90 | \$244.91 | \$0.00 | \$0.00 | \$0.51 | \$65.74 | \$2.41 / Cuyd | \$0.00 | \$0.00 | \$310.65 |
| | Compaction, trench, walk behind, vib. plate, backfill | 1411 | Cuyd | \$1.90 | \$2,681.09 | \$0.00 | \$0.00 | \$0.51 | \$719.66 | \$2.41 / Cuyd | \$0.00 | \$0.00 | \$3,400.75 |
| | Compaction, struct. or trench, walk behind, vib. plate subgrade | 111 | Cuyd | \$1.90 | \$210.90 | \$0.00 | \$0.00 | \$0.51 | \$56.61 | \$2.41 / Cuyd | \$0.00 | \$0.00 | \$267.51 |
| | Compaction, struct. or trench, walk behind, vib. plate bedding | 167 | Cuyd | \$1.90 | \$317.30 | \$0.00 | \$0.00 | \$0.51 | \$85.17 | \$2.41 / Cuyd | \$0.00 | \$0.00 | \$402.47 |
| | Compaction, struct. or trench, walk behind, vib. plate backfill channel | 391 | Cuyd | \$1.90 | \$742.90 | \$0.00 | \$0.00 | \$0.51 | \$199.41 | \$2.41 / Cuyd | \$0.00 | \$0.00 | \$942.31 |
| 02420 - Excavating, structural | | | | | | | | | | | | | |
| | Excavating, structural, mach excav, com earth, hyd backhoe, 2 CY | 890 | Cuyd | \$5.28 | \$4,699.20 | \$0.00 | \$0.00 | \$6.70 | \$5,963.00 | \$11.98 / Cuyd | \$0.00 | \$0.00 | \$10,662.20 |
| 02450 - Excavating, trench | | | | | | | | | | | | | |
| | Excavate trench, no sht or dewtrg, 4'-6' D, 1-1/2 CY hyd bac | 2518 | Cuyd | \$1.95 | \$4,910.30 | \$0.00 | \$0.00 | \$1.42 | \$3,575.70 | \$3.37 / Cuyd | \$0.00 | \$0.00 | \$8,486.00 |
| 02460 - Hauling | | | | | | | | | | | | | |
| | Hauling, LCY, no loading, 20 c.y. dump truck, 30 MI RT, 0.33 lds/hr | 1580 | Cuyd | \$5.95 | \$9,398.62 | \$0.00 | \$0.00 | \$10.40 | \$16,427.84 | \$16.35 / Cuyd | \$0.00 | \$0.00 | \$25,826.46 |
| | Hauling, LCY, no loading, 20 c.y. dump truck, 20 MI RT, 0.4 lds/hr, | 499 | Cuyd | \$5.95 | \$2,969.05 | \$0.00 | \$0.00 | \$10.40 | \$5,189.60 | \$16.35 / Cuyd | \$0.00 | \$0.00 | \$8,158.65 |
| | Loading Trucks, F.E. Loader, 3 C.Y.. | 1580 | Cuyd | \$0.74 | \$1,168.90 | \$0.00 | \$0.00 | \$1.24 | \$1,958.70 | \$1.98 / Cuyd | \$0.00 | \$0.00 | \$3,127.61 |
| | Loading Trucks, F.E. Loader, 3 C.Y... channel | 499 | Cuyd | \$0.74 | \$369.26 | \$0.00 | \$0.00 | \$1.24 | \$618.76 | \$1.98 / Cuyd | \$0.00 | \$0.00 | \$988.02 |
| 02570 - Catch basins or manholes | | | | | | | | | | | | | |
| | Catch basins or manholes, concrete, precast, 6' I.D., 6' deep | 6 | Each | \$846.67 | \$5,080.02 | \$1,850.00 | \$11,100.00 | \$189.01 | \$1,134.06 | \$2885.68 / Each | \$0.00 | \$0.00 | \$17,314.08 |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |

| Item | Item Description | Quantity | Unit | Labor \$/Unit | Labor Amount | Materials \$/Unit | Materials Amount | Equip \$/Unit | Equip Amount | Total \$/Unit | Subs Amount | Other Amount | Grand Total |
|---|---|----------|------|---------------|---------------------|-------------------|---------------------|---------------|--------------------|------------------|---------------|---------------------|---------------------|
| <i>02610 - Asphalt concrete pavement</i> | | | | | | | | | | | | | |
| | Asphaltic conc pavement, pavement replacement over trench, 4" | 436 | Sqyd | \$35.00 | \$15,254.05 | \$18.00 | \$7,844.94 | \$2.98 | \$1,298.77 | \$55.98 / Sqyd | \$0.00 | \$0.00 | \$24,397.76 |
| | <i>SITE CONSTRUCTION Total</i> | | | | <i>\$65,066.76</i> | | <i>\$52,682.41</i> | | <i>\$45,732.39</i> | | <i>\$0.00</i> | <i>\$0.00</i> | <i>\$163,481.56</i> |
| <i>03 - CONCRETE</i> | | | | | | | | | | | | | |
| <i>03090 - Forms place, slab grade</i> | | | | | | | | | | | | | |
| | Forms in place, SOG, edge forms, 7" to 12" high, wood, channel | 1216 | Sfca | \$3.99 | \$4,851.84 | \$0.80 | \$972.80 | \$0.00 | \$0.00 | \$4.79 / Sfca | \$0.00 | \$0.00 | \$5,824.64 |
| <i>03110 - Forms in place, walls</i> | | | | | | | | | | | | | |
| | Forms in place, walls, job built plyform, to 8' high, channel | 2400 | Sfca | \$7.35 | \$17,640.00 | \$2.59 | \$6,216.00 | \$0.00 | \$0.00 | \$9.94 / Sfca | \$0.00 | \$0.00 | \$23,856.00 |
| <i>03140 - Welded wire fabric</i> | | | | | | | | | | | | | |
| | Welded wire fabric, sheets, 4 x 4 - W4 x W4 (4 x 4), 85 lb/CSF, | 54 | Csf | \$36.61 | \$1,976.94 | \$29.41 | \$1,588.14 | \$0.00 | \$0.00 | \$66.02 / Csf | \$0.00 | \$0.00 | \$3,565.08 |
| | Welded wire fabric, sheets, 4 x 4 - W4 x W4 (4 x 4), 85 lb/CSF, | 12 | Csf | \$36.61 | \$439.32 | \$29.41 | \$352.92 | \$0.00 | \$0.00 | \$66.02 / Csf | \$0.00 | \$0.00 | \$792.24 |
| <i>03150 - Concrete, ready mix</i> | | | | | | | | | | | | | |
| | Headwall | 195 | Cuyd | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$1000 / Cuyd | \$0.00 | \$195,000.00 | \$195,000.00 |
| | Concrete, ready mix, regular weight, 4000 psi | 104 | Cuyd | \$0.00 | \$0.00 | \$120.00 | \$12,480.00 | \$0.00 | \$0.00 | \$120 / Cuyd | \$0.00 | \$0.00 | \$12,480.00 |
| <i>03170 - Placing concrete</i> | | | | | | | | | | | | | |
| | Placing conc, incl vib, slab on grade, pumped, channel | 59 | Cuyd | \$17.45 | \$1,029.55 | \$0.00 | \$0.00 | \$5.56 | \$328.04 | \$23.01 / Cuyd | \$0.00 | \$0.00 | \$1,357.59 |
| | Placing conc, incl vib, walls, pumped, channel | 45 | Cuyd | \$32.28 | \$1,452.60 | \$0.00 | \$0.00 | \$10.28 | \$462.60 | \$42.56 / Cuyd | \$0.00 | \$0.00 | \$1,915.20 |
| <i>03180 - Finishing floors</i> | | | | | | | | | | | | | |
| | Finishing slabs, break ties, forms & patch voids | 1216 | Sqft | \$1.17 | \$1,422.72 | \$0.03 | \$36.48 | \$0.00 | \$0.00 | \$1.2 / Sqft | \$0.00 | \$0.00 | \$1,459.20 |
| | Finishing floors, monolithic, screed, float, & hand trowel, channel | 4800 | Sqft | \$0.62 | \$2,976.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.62 / Sqft | \$0.00 | \$0.00 | \$2,976.00 |
| <i>03190 - Finishing walls</i> | | | | | | | | | | | | | |
| | Finishing slabs, break ties, forms & patch voids | 2400 | Sqft | \$1.17 | \$2,808.00 | \$0.03 | \$72.00 | \$0.00 | \$0.00 | \$1.2 / Sqft | \$0.00 | \$0.00 | \$2,880.00 |
| | Finishing walls, carborundum rub, wet rub | 1200 | Sqft | \$2.13 | \$2,556.00 | \$0.03 | \$36.00 | \$0.00 | \$0.00 | \$2.16 / Sqft | \$0.00 | \$0.00 | \$2,592.00 |
| | <i>CONCRETE Total</i> | | | | <i>\$37,152.97</i> | | <i>\$21,754.34</i> | | <i>\$790.64</i> | | <i>\$0.00</i> | <i>\$195,000.00</i> | <i>\$254,697.95</i> |
| <i>15 - MECHANICAL</i> | | | | | | | | | | | | | |
| <i>15090 - Pipe, drng&sewage, concret</i> | | | | | | | | | | | | | |
| | Piping, drainage & sewage, RCP, class 3, no gaskets, 18" dia | 275 | Lnft | \$18.85 | \$5,183.75 | \$32.00 | \$8,800.00 | \$2.18 | \$599.50 | \$53.03 / Lnft | \$0.00 | \$0.00 | \$14,583.25 |
| | Piping, drainage & sewage, RCP, class 3, no gaskets, 36" dia | 1000 | Lnft | \$39.70 | \$39,700.00 | \$73.00 | \$73,000.00 | \$3.94 | \$3,940.00 | \$116.64 / Lnft | \$0.00 | \$0.00 | \$116,640.00 |
| <i>15395 - Cleanouts</i> | | | | | | | | | | | | | |
| | Cleanouts, flr type, rnd top, xtra hvy dty, 36" pipe size | 3 | Each | \$791.91 | \$2,375.73 | \$1,500.00 | \$4,500.00 | \$0.00 | \$0.00 | \$2291.91 / Each | \$0.00 | \$0.00 | \$6,875.73 |
| | <i>MECHANICAL Total</i> | | | | <i>\$47,259.48</i> | | <i>\$86,300.00</i> | | <i>\$4,539.50</i> | | <i>\$0.00</i> | <i>\$0.00</i> | <i>\$138,098.98</i> |
| | <i>Project AC Total</i> | | | | <i>\$149,479.21</i> | | <i>\$160,736.75</i> | | <i>\$55,862.53</i> | | <i>\$0.00</i> | <i>\$195,000.00</i> | <i>\$561,078.49</i> |
| | <i>Grand Total</i> | | | | <i>\$149,479.21</i> | | <i>\$160,736.75</i> | | <i>\$55,862.53</i> | | <i>\$0.00</i> | <i>\$195,000.00</i> | <i>\$561,078.49</i> |

| Category | Percent | Amount |
|-------------------------------------|---------|------------------|
| Labor | 26.64% | \$149,479 |
| Material | 28.65% | \$160,737 |
| Equipment | 9.96% | \$55,863 |
| Subcontractor | 0.00% | \$0 |
| Other | 34.75% | \$195,000 |
| Net Costs | | \$561,078 |
| Labor Mark-up | 18.00% | \$26,906 |
| Material Mark-up | 15.00% | \$24,111 |
| Subcontractor Mark-up | 5.00% | \$0 |
| Equipment Mark-up | 15.00% | \$8,379 |
| Sales tax (material) | 7.75% | \$12,457 |
| Sales tax (equipment) | 7.75% | \$4,329 |
| Material Shipping & Handling | 2.50% | \$4,018 |
| Worker's Travel/Subsistence | 0.10% | \$149 |
| Subtotal | | \$641,429 |
| Contractor General Conditions | 12.00% | \$76,971 |
| Subtotal | | \$718,400 |
| Earthquake Insurance | 0.10% | \$718 |
| Subtotal | | \$719,119 |
| Construction Contingency | 20.00% | \$143,824 |
| Subtotal | | \$862,943 |
| Bldg Risk, Liability Auto Ins. | 2.00% | \$17,259 |
| Subtotal | | \$880,201 |
| Performance Bond | 1.00% | \$8,802 |
| Payment Bond | 1.00% | \$8,802 |
| Subtotal | | \$897,806 |
| Engineering Fee | 10.00% | \$56,108 |
| Environmental Permitting (Lump Sum) | - | \$39,000 |
| Total Estimate | | \$992,913 |



City of Carlsbad, Master Drainage Plan

| | |
|--------------------------------|------------------|
| Project Number:: | 128290 |
| Client:: | City of Carlsbad |
| Estimator(s):: | SB / DG |
| Estimating Office:: | Walnut Creek |
| Estimate Issue Number:: | 01 |
| Estimate Original Issue Date:: | 11/14/1005 |
| Estimate Revision Number:: | 04 |
| Estimate Revision Date:: | 6/27/2008 |
| BC Project Manager:: | Chris Herencia |
| Estimate QA/QC Reviewer:: | Butch Matthews |
| Estimate QA/QC Date:: | 6/27/2008 |

PROJECT LOCATION / PROCESS AREA

Project AFA - Located in Basin A

| Item | Item Description | Quantity | Unit | Labor \$/Unit | Labor Amount | Materials \$/Unit | Materials Amount | Equip \$/Unit | Equip Amount | Total \$/Unit | Subs Amount | Other Amount | Grand Total |
|----------------------------|--|----------|------|---------------|--------------|-------------------|------------------|---------------|--------------|-----------------|-------------|--------------|-------------|
| Project AFA | | | | | | | | | | | | | |
| 02 - SITE CONSTRUCTION | | | | | | | | | | | | | |
| 02210 - Clear and grub | | | | | | | | | | | | | |
| | Clear & grub, brush, including stumps | 0 | Acre | \$1,759.00 | \$703.60 | \$0.00 | \$0.00 | \$3,686.00 | \$1,474.40 | \$5445 / Acre | \$0.00 | \$0.00 | \$2,178.00 |
| 02420 - Excavating | | | | | | | | | | | | | |
| | Excavation, self prop scraper, 14 CY 1/4 push dozer | 500 | Cuyd | \$1.29 | \$645.00 | \$0.00 | \$0.00 | \$5.19 | \$2,595.00 | \$6.48 / Cuyd | \$0.00 | \$0.00 | \$3,240.00 |
| 02360 - Compaction | | | | | | | | | | | | | |
| | Compaction, walk behind, vibrating pl 18" w, 12" lifts, 4 passes, | 593 | Cuyd | \$1.90 | \$1,126.70 | \$0.00 | \$0.00 | \$0.51 | \$302.43 | \$2.41 / Cuyd | \$0.00 | \$0.00 | \$1,429.13 |
| 02460 - Hauling | | | | | | | | | | | | | |
| | Fill, spread dumped material, by dozer, no compaction | 593 | Cuyd | \$0.72 | \$426.96 | \$0.00 | \$0.00 | \$1.15 | \$681.95 | \$1.87 / Cuyd | \$0.00 | \$0.00 | \$1,108.91 |
| 02470 - Soil stabilization | | | | | | | | | | | | | |
| | Soil stabilization, geotextile fabric, woven, H.D., 600 lb. tensile st | 1646 | Sqyd | \$0.32 | \$526.72 | \$1.85 | \$3,045.10 | \$0.00 | \$0.00 | \$2.17 / Sqyd | \$0.00 | \$0.00 | \$3,571.82 |
| 02480 - Rip-rap | | | | | | | | | | | | | |
| | Rip-rap, gabions, galv steel mesh boxes, stone filled, 36" deep | 100 | Cuyd | \$49.95 | \$4,995.00 | \$60.56 | \$6,056.00 | \$16.44 | \$1,644.00 | \$126.95 / Cuyd | \$0.00 | \$0.00 | \$12,695.00 |
| 02490 - Erosion control | | | | | | | | | | | | | |
| | Erosion control allowance: | 1 | Lsum | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$2614 / Lsum | \$0.00 | \$2,614.00 | \$2,614.00 |
| | SITE CONSTRUCTION Total | | | | \$8,423.98 | | \$9,101.10 | | \$6,697.78 | | \$0.00 | \$2,614.00 | \$26,836.86 |
| | Project AFA Total | | | | \$8,423.98 | | \$9,101.10 | | \$6,697.78 | | \$0.00 | \$2,614.00 | \$26,836.86 |
| | Grand Total | | | | \$8,423.98 | | \$9,101.10 | | \$6,697.78 | | \$0.00 | \$2,614.00 | \$26,836.86 |

| Category | Percent | Amount |
|-------------------------------------|---------|-----------------|
| Labor | 31.39% | \$8,424 |
| Material | 33.91% | \$9,101 |
| Equipment | 24.96% | \$6,698 |
| Subcontractor | 0.00% | \$0 |
| Other | 9.74% | \$2,614 |
| Net Costs | | \$26,837 |
| Labor Mark-up | 18.00% | \$1,516 |
| Material Mark-up | 15.00% | \$1,365 |
| Subcontractor Mark-up | 5.00% | \$0 |
| Equipment Mark-up | 15.00% | \$1,005 |
| Sales tax (material) | 7.75% | \$705 |
| Sales tax (equipment) | 7.75% | \$519 |
| Material Shipping & Handling | 2.50% | \$228 |
| Worker's Travel/Subsistence | 0.10% | \$8 |
| Subtotal | | \$32,183 |
| Contractor General Conditions | 12.00% | \$3,862 |
| Subtotal | | \$36,045 |
| Earthquake Insurance | 0.10% | \$36 |
| Subtotal | | \$36,081 |
| Construction Contingency | 25.00% | \$9,020 |
| Subtotal | | \$45,102 |
| Bldg Risk, Liability Auto Ins. | 2.00% | \$902 |
| Subtotal | | \$46,004 |
| Performance Bond | 1.00% | \$460 |
| Payment Bond | 1.00% | \$460 |
| Subtotal | | \$46,924 |
| Engineering Fee | 10.00% | \$2,684 |
| Environmental Permitting (Lump Sum) | - | \$42,000 |
| Total Estimate | | \$91,608 |



City of Carlsbad, Master Drainage Plan

| | |
|--------------------------------|------------------|
| Project Number:: | 128290 |
| Client:: | City of Carlsbad |
| Estimator(s):: | SB / DG |
| Estimating Office:: | Walnut Creek |
| Estimate Issue Number:: | 01 |
| Estimate Original Issue Date:: | 11/14/2005 |
| Estimate Revision Number:: | 04 |
| Estimate Revision Date:: | 6/27/2008 |
| BC Project Manager:: | Chris Herencia |
| Estimate QA/QC Reviewer:: | Butch Matthews |
| Estimate QA/QC Date:: | 6/27/2008 |

PROJECT LOCATION / PROCESS AREA

Project AFB - Located in Basin A

| Item | Item Description | Quantity | Unit | Labor \$/Unit | Labor Amount | Materials \$/Unit | Materials Amount | Equip \$/Unit | Equip Amount | Total \$/Unit | Subs Amount | Other Amount | Grand Total |
|----------------------------|--|----------|------|---------------|--------------|-------------------|------------------|---------------|--------------|-----------------|-------------|--------------|-------------|
| Project AFB | | | | | | | | | | | | | |
| 02 - SITE CONSTRUCTION | | | | | | | | | | | | | |
| 02210 - Clear and grub | | | | | | | | | | | | | |
| | Clear & grub, brush, including stumps | 1 | Acre | \$1,759.00 | \$1,055.40 | \$0.00 | \$0.00 | \$3,686.00 | \$2,211.60 | \$5445 / Acre | \$0.00 | \$0.00 | \$3,267.00 |
| 02420 - Excavating | | | | | | | | | | | | | |
| | Excavation, self prop scraper, 14 CY 1/4 push dozer | 1500 | Cuyd | \$1.29 | \$1,935.00 | \$0.00 | \$0.00 | \$5.19 | \$7,785.00 | \$6.48 / Cuyd | \$0.00 | \$0.00 | \$9,720.00 |
| 02360 - Compaction | | | | | | | | | | | | | |
| | Compaction, walk behind, vibrating pl 18" w, 12" lifts, 4 passes, | 1650 | Cuyd | \$1.90 | \$3,135.00 | \$0.00 | \$0.00 | \$0.51 | \$841.50 | \$2.41 / Cuyd | \$0.00 | \$0.00 | \$3,976.50 |
| 02460 - Hauling | | | | | | | | | | | | | |
| | Disposal fee | 53 | Trk | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$105 / Trk | \$0.00 | \$5,601.75 | \$5,601.75 |
| | Hauling, LCY, no loading, 12 CY dump truck, clear & grub | 1067 | Cuyd | \$4.66 | \$4,972.22 | \$0.00 | \$0.00 | \$9.74 | \$10,392.58 | \$14.4 / Cuyd | \$0.00 | \$0.00 | \$15,364.80 |
| | Loading Trucks, F.E. Loader, 3 C.Y., clear & grub | 1067 | Cuyd | \$0.74 | \$789.58 | \$0.00 | \$0.00 | \$1.24 | \$1,323.08 | \$1.98 / Cuyd | \$0.00 | \$0.00 | \$2,112.66 |
| | Fill, spread dumped material, by dozer, no compaction | 1650 | Cuyd | \$0.72 | \$1,188.00 | \$0.00 | \$0.00 | \$1.15 | \$1,897.50 | \$1.87 / Cuyd | \$0.00 | \$0.00 | \$3,085.50 |
| 02470 - Soil stabilization | | | | | | | | | | | | | |
| | Soil stabilization, geotextile fabric, woven, H.D., 600 lb. tensile st | 1646 | Sqyd | \$0.32 | \$526.72 | \$1.85 | \$3,045.10 | \$0.00 | \$0.00 | \$2.17 / Sqyd | \$0.00 | \$0.00 | \$3,571.82 |
| 02480 - Rip-rap | | | | | | | | | | | | | |
| | Rip-rap, gabions, galv steel mesh boxes, stone filled, 36" deep | 132 | Cuyd | \$49.95 | \$6,593.40 | \$60.56 | \$7,993.92 | \$16.44 | \$2,170.08 | \$126.95 / Cuyd | \$0.00 | \$0.00 | \$16,757.40 |
| 02490 - Erosion control | | | | | | | | | | | | | |
| | Erosion control allowance: | 1 | Lsum | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$2614 / Lsum | \$0.00 | \$2,614.00 | \$2,614.00 |
| | SITE CONSTRUCTION Total | | | | \$20,195.32 | | \$11,039.02 | | \$26,621.34 | | \$0.00 | \$8,215.75 | \$66,071.43 |
| | Project AFB Total | | | | \$20,195.32 | | \$11,039.02 | | \$26,621.34 | | \$0.00 | \$8,215.75 | \$66,071.43 |
| | Grand Total | | | | \$20,195.32 | | \$11,039.02 | | \$26,621.34 | | \$0.00 | \$8,215.75 | \$66,071.43 |

| Category | Percent | Amount |
|-------------------------------------|---------|------------------|
| Labor | 30.57% | \$20,195 |
| Material | 16.71% | \$11,039 |
| Equipment | 40.29% | \$26,621 |
| Subcontractor | 0.00% | \$0 |
| Other | 12.43% | \$8,216 |
| Net Costs | | \$66,071 |
| Labor Mark-up | 18.00% | \$3,635 |
| Material Mark-up | 15.00% | \$1,656 |
| Subcontractor Mark-up | 5.00% | \$0 |
| Equipment Mark-up | 15.00% | \$3,993 |
| Sales tax (material) | 7.75% | \$856 |
| Sales tax (equipment) | 7.75% | \$2,063 |
| Material Shipping & Handling | 2.50% | \$276 |
| Worker's Travel/Subsistence | 0.10% | \$20 |
| Subtotal | | \$78,570 |
| Contractor General Conditions | 12.00% | \$9,428 |
| Subtotal | | \$87,999 |
| Earthquake Insurance | 0.10% | \$88 |
| Subtotal | | \$88,087 |
| Construction Contingency | 25.00% | \$22,022 |
| Subtotal | | \$110,109 |
| Bldg Risk, Liability Auto Ins. | 2.00% | \$2,202 |
| Subtotal | | \$112,311 |
| Performance Bond | 1.00% | \$1,123 |
| Payment Bond | 1.00% | \$1,123 |
| Subtotal | | \$114,557 |
| Engineering Fee | 10.00% | \$6,607 |
| Environmental Permitting (Lump Sum) | - | \$42,000 |
| Total Estimate | | \$163,164 |



City of Carlsbad, Drainage Master Plan

| | |
|--------------------------------|------------------|
| Project Number:: | 128290 |
| Client:: | City of Carlsbad |
| Estimator(s):: | SB / DG |
| Estimating Office:: | Walnut Creek |
| Estimate Issue Number:: | 01 |
| Estimate Original Issue Date:: | 5/12/2006 |
| Estimate Revision Number:: | 04 |
| Estimate Revision Date:: | 6/27/2008 |
| BC Project Manager:: | Chris Herencia |
| Estimate QA/QC Reviewer:: | Bob Ferguson |
| Estimate QA/QC Date:: | 6/27/2008 |

PROJECT LOCATION / PROCESS AREA

Project B - Located in Basin B

| Item | Item Description | Quantity | Unit | Labor \$/Unit | Labor Amount | Materials \$/Unit | Materials Amount | Equip \$/Unit | Equip Amount | Total \$/Unit | Subs Amount | Other Amount | Grand Total |
|---------------------------------------|--|----------|------|---------------|---------------------|-------------------|--------------------|---------------|---------------------|-----------------|---------------|--------------------|-----------------------|
| Project B | | | | | | | | | | | | | |
| 02 - SITE CONSTRUCTION | | | | | | | | | | | | | |
| <i>02060 - Site demolition</i> | | | | | | | | | | | | | |
| | Site dml, conc7" to 24" thick, rod reinforced | 25 | Cuyd | \$92.56 | \$2,314.00 | \$0.00 | \$0.00 | \$61.09 | \$1,527.25 | \$153.65 / Cuyd | \$0.00 | \$0.00 | \$3,841.25 |
| <i>02210 - Clear and grub</i> | | | | | | | | | | | | | |
| | Clear & grub, brush, including stumps | 2 | Acre | \$1,759.00 | \$3,518.00 | \$0.00 | \$0.00 | \$3,686.00 | \$7,372.00 | \$5445 / Acre | \$0.00 | \$0.00 | \$10,890.00 |
| <i>02420 - Excavating, structural</i> | | | | | | | | | | | | | |
| | Excavating, structural, mach excav, com earth, hyd backhoe, 3 CY | 36000 | Cuyd | \$5.28 | \$190,080.00 | \$0.00 | \$0.00 | \$6.70 | \$241,200.00 | \$11.98 / Cuyd | \$0.00 | \$0.00 | \$431,280.00 |
| | Excavating, structural, mach excav, com earth, hyd backhoe, 3 CY | 1000 | Cuyd | \$5.28 | \$5,280.00 | \$0.00 | \$0.00 | \$6.70 | \$6,700.00 | \$11.98 / Cuyd | \$0.00 | \$0.00 | \$11,980.00 |
| <i>02430 - Fill</i> | | | | | | | | | | | | | |
| | Fill, spread dumped material, by dozer, no compaction | 1400 | Cuyd | \$0.72 | \$1,008.00 | \$0.00 | \$0.00 | \$1.15 | \$1,610.00 | \$1.87 / Cuyd | \$0.00 | \$0.00 | \$2,618.00 |
| <i>02460 - Hauling</i> | | | | | | | | | | | | | |
| | Disposal fee | 2 | Trk | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$105 / Trk | \$0.00 | \$210.00 | \$210.00 |
| | Hauling, LCY, no loading, 20 c.y. dump truck, 30 MI RT, 0.33 lds/hr, | 25 | Cuyd | \$5.95 | \$148.75 | \$0.00 | \$0.00 | \$10.40 | \$260.00 | \$16.35 / Cuyd | \$0.00 | \$0.00 | \$408.75 |
| | Hauling, LCY, no loading, 20 c.y. dump truck, 30 MI RT, 0.33 lds/hr | 30000 | Cuyd | \$5.95 | \$178,500.00 | \$0.00 | \$0.00 | \$10.40 | \$312,000.00 | \$16.35 / Cuyd | \$0.00 | \$0.00 | \$490,500.00 |
| | Hauling, LCY, no loading, 20 c.y. dump truck, 30 MI RT, 0.33 lds/hr | 2456 | Cuyd | \$5.95 | \$14,613.20 | \$0.00 | \$0.00 | \$10.40 | \$25,542.40 | \$16.35 / Cuyd | \$0.00 | \$0.00 | \$40,155.60 |
| | Hauling, LCY, no loading, 20 c.y. dump truck, 30 MI RT, 0.33 lds/hr | 1400 | Cuyd | \$5.95 | \$8,330.00 | \$0.00 | \$0.00 | \$10.40 | \$14,560.00 | \$16.35 / Cuyd | \$0.00 | \$0.00 | \$22,890.00 |
| | Loading Trucks, F.E. Loader, 3 C.Y.. | 26000 | Cuyd | \$0.74 | \$19,240.00 | \$0.00 | \$0.00 | \$1.24 | \$32,240.00 | \$1.98 / Cuyd | \$0.00 | \$0.00 | \$51,480.00 |
| | Loading Trucks, F.E. Loader, 3 C.Y., concrete | 23 | Cuyd | \$0.74 | \$17.02 | \$0.00 | \$0.00 | \$1.24 | \$28.52 | \$1.98 / Cuyd | \$0.00 | \$0.00 | \$45.54 |
| | Loading Trucks, F.E. Loader, 3 C.Y.. | 1400 | Cuyd | \$0.74 | \$1,036.00 | \$0.00 | \$0.00 | \$1.24 | \$1,736.00 | \$1.98 / Cuyd | \$0.00 | \$0.00 | \$2,772.00 |
| | Loading Trucks, F.E. Loader, 3 C.Y.. | 2456 | Cuyd | \$0.74 | \$1,817.44 | \$0.00 | \$0.00 | \$1.24 | \$3,045.44 | \$1.98 / Cuyd | \$0.00 | \$0.00 | \$4,862.88 |
| <i>02470 - Soil stabilization</i> | | | | | | | | | | | | | |
| | Soil stabilization, geotextile fabric, woven, H.D., 600 lb. tensile st | 507 | Sqyd | \$0.32 | \$162.24 | \$1.85 | \$937.95 | \$0.00 | \$0.00 | \$2.17 / Sqyd | \$0.00 | \$0.00 | \$1,100.19 |
| <i>02480 - Rip-rap</i> | | | | | | | | | | | | | |
| | Rip-rap, gabions, galv steel mesh boxes, stone filled, 36" deep | 618 | Cuyd | \$49.95 | \$30,869.10 | \$60.56 | \$37,426.08 | \$16.44 | \$10,159.92 | \$126.95 / Cuyd | \$0.00 | \$0.00 | \$78,455.10 |
| | SITE CONSTRUCTION Total | | | | \$456,933.75 | | \$38,364.03 | | \$657,981.53 | | \$0.00 | \$210.00 | \$1,153,489.31 |
| 03 - CONCRETE | | | | | | | | | | | | | |
| <i>03150 - Concrete, ready mix</i> | | | | | | | | | | | | | |
| | Retaining wall | 25 | Cuyd | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$1000 / Cuyd | \$0.00 | \$25,000.00 | \$25,000.00 |
| | CONCRETE Total | | | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | \$25,000.00 | \$25,000.00 |
| | Project B Total | | | | \$456,933.75 | | \$38,364.03 | | \$657,981.53 | | \$0.00 | \$25,210.00 | \$1,178,489.31 |
| | Grand Total | | | | \$456,933.75 | | \$38,364.03 | | \$657,981.53 | | \$0.00 | \$25,210.00 | \$1,178,489.31 |

| Category | Percent | Amount |
|-------------------------------------|---------|--------------------|
| Labor | 38.77% | \$456,934 |
| Material | 3.26% | \$38,364 |
| Equipment | 55.83% | \$657,982 |
| Subcontractor | 0.00% | \$0 |
| Other | 2.14% | \$25,210 |
| Net Costs | | \$1,178,489 |
| Labor Mark-up | 18.00% | \$82,248 |
| Material Mark-up | 15.00% | \$5,755 |
| Subcontractor Mark-up | 5.00% | \$0 |
| Equipment Mark-up | 15.00% | \$98,697 |
| Sales tax (material) | 7.75% | \$2,973 |
| Sales tax (equipment) | 7.75% | \$50,994 |
| Material Shipping & Handling | 2.50% | \$959 |
| Worker's Travel/Subsistence | 0.10% | \$457 |
| Subtotal | | \$1,420,572 |
| Contractor General Conditions | 12.00% | \$170,469 |
| Subtotal | | \$1,591,041 |
| Earthquake Insurance | 0.10% | \$1,591 |
| Subtotal | | \$1,592,632 |
| Construction Contingency | 20.00% | \$318,526 |
| Subtotal | | \$1,911,158 |
| Bldg Risk, Liability Auto Ins. | 2.00% | \$38,223 |
| Subtotal | | \$1,949,381 |
| Performance Bond | 1.00% | \$19,494 |
| Payment Bond | 1.00% | \$19,494 |
| Subtotal | | \$1,988,369 |
| Engineering Fee | 10.00% | \$117,849 |
| Environmental Permitting (Lump Sum) | - | \$25,000 |
| Total Estimate | | \$2,131,218 |



City of Carlsbad, Master Drainage Plan

| | |
|--------------------------------|------------------|
| Project Number:: | 128290 |
| Client:: | City of Carlsbad |
| Estimator(s):: | JW / DG |
| Estimating Office:: | Walnut Creek |
| Estimate Issue Number:: | 01 |
| Estimate Original Issue Date:: | 3/14/2006 |
| Estimate Revision Number:: | 04 |
| Estimate Revision Date:: | 6/27/2008 |
| BC Project Manager:: | Chris Herencia |
| Estimate QA/QC Reviewer:: | Bob Ferguson |
| Estimate QA/QC Date:: | 6/27/2008 |

PROJECT LOCATION / PROCESS AREA

Project BB-1

| Item | Item Description | Quantity | Unit | Labor \$/Unit | Labor Amount | Materials \$/Unit | Materials Amount | Equip \$/Unit | Equip Amount | Total \$/Unit | Subs Amount | Other Amount | Grand Total |
|--|--|----------|------|---------------|---------------|-------------------|------------------|---------------|-------------------|------------------|---------------|---------------|-------------------|
| Project BB-1 | | | | | | | | | | | | | |
| 01 - GENERAL REQUIREMENTS | | | | | | | | | | | | | |
| 01200 - General equipment rental | | | | | | | | | | | | | |
| | Trench box, 7200 lbs, 6'x 20' | 25 | Day | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$141.60 | \$3,540.00 | \$141.6 / Day | \$0.00 | \$0.00 | \$3,540.00 |
| | Trench Plates allowance | 1 | Mo | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$900.00 | \$900.00 | \$900 / Mo | \$0.00 | \$0.00 | \$900.00 |
| | GENERAL REQUIREMENTS Total | | | | \$0.00 | | \$0.00 | | \$4,440.00 | | \$0.00 | \$0.00 | \$4,440.00 |
| 02 - SITE CONSTRUCTION | | | | | | | | | | | | | |
| 02020 - Underground marking tape | | | | | | | | | | | | | |
| | Underground tape, detectable aluminum, 2" | 11 | Clf | \$2.34 | \$25.74 | \$3.06 | \$33.66 | \$0.00 | \$0.00 | \$5.4 / Clf | \$0.00 | \$0.00 | \$59.40 |
| 02060 - Site demolition | | | | | | | | | | | | | |
| | Site dml, no hauling, pavement removal, bit, 4" to 6" thick | 672 | Sqyd | \$5.29 | \$3,554.88 | \$0.00 | \$0.00 | \$3.49 | \$2,345.28 | \$8.78 / Sqyd | \$0.00 | \$0.00 | \$5,900.16 |
| | Asphalt disposal - hauling and disposal fee, 4" thick | 672 | Sqyd | \$1.00 | \$672.00 | \$4.70 | \$3,158.40 | \$1.32 | \$887.04 | \$7.02 / Sqyd | \$0.00 | \$0.00 | \$4,717.44 |
| 02170 - Saw cutting | | | | | | | | | | | | | |
| | Saw cutting, asphalt, up to 3" deep | 2211 | Lnft | \$0.48 | \$1,061.28 | \$0.07 | \$154.77 | \$0.26 | \$574.86 | \$0.81 / Lnft | \$0.00 | \$0.00 | \$1,790.91 |
| | Saw cutting, asphalt, after 3" deep; each addl inch of depth | 2211 | Lnft | \$0.82 | \$1,813.02 | \$0.30 | \$663.30 | \$0.44 | \$972.84 | \$1.56 / Lnft | \$0.00 | \$0.00 | \$3,449.16 |
| 02310 - Fine grade | | | | | | | | | | | | | |
| | Fine grade, fine grade granular base for sidewalks and bikeways | 100 | Sqyd | \$1.06 | \$106.00 | \$0.00 | \$0.00 | \$0.15 | \$15.00 | \$1.21 / Sqyd | \$0.00 | \$0.00 | \$121.00 |
| 02320 - Backfill | | | | | | | | | | | | | |
| | Backfill, dozer backfilling, trench, no compaction | 1160 | Cuyd | \$0.80 | \$928.00 | \$0.00 | \$0.00 | \$1.28 | \$1,484.80 | \$2.08 / Cuyd | \$0.00 | \$0.00 | \$2,412.80 |
| 02340 - Bedding | | | | | | | | | | | | | |
| | Bedding, crushed stone 3/4" to 1/2" | 224 | Cuyd | \$8.47 | \$1,897.28 | \$32.03 | \$7,174.72 | \$1.89 | \$423.36 | \$42.39 / Cuyd | \$0.00 | \$0.00 | \$9,495.36 |
| 02360 - Compaction | | | | | | | | | | | | | |
| | Compaction, walk behind, vibrating roller 24" W, 6" lifts, 2 passes | 1160 | Cuyd | \$1.90 | \$2,204.00 | \$0.00 | \$0.00 | \$0.51 | \$591.60 | \$2.41 / Cuyd | \$0.00 | \$0.00 | \$2,795.60 |
| | Compaction, rammer tamper, 6" to 11", 4" lifts, 2 passes | 1160 | Cuyd | \$2.93 | \$3,398.80 | \$0.00 | \$0.00 | \$0.78 | \$904.80 | \$3.71 / Cuyd | \$0.00 | \$0.00 | \$4,303.60 |
| 02450 - Excavating, trench | | | | | | | | | | | | | |
| | Excavate trench, cont ftg, no sht or dewtrg, 4'-6' D, 1-1/2 CY hyd bac | 1456 | Cuyd | \$1.95 | \$2,839.20 | \$0.00 | \$0.00 | \$1.42 | \$2,067.52 | \$3.37 / Cuyd | \$0.00 | \$0.00 | \$4,906.72 |
| 02460 - Hauling | | | | | | | | | | | | | |
| | Hauling, LCY, no loading, 20 c.y. dump truck, 30 MI RT, 0.33 lds/hr | 296 | Cuyd | \$5.95 | \$1,761.20 | \$0.00 | \$0.00 | \$10.40 | \$3,078.40 | \$16.35 / Cuyd | \$0.00 | \$0.00 | \$4,839.60 |
| | Loading Trucks, F.E. Loader, 3 C.Y.. | 296 | Cuyd | \$0.74 | \$219.04 | \$0.00 | \$0.00 | \$1.24 | \$367.04 | \$1.98 / Cuyd | \$0.00 | \$0.00 | \$586.08 |
| | Disposal fee | 15 | Trk | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$105 / Trk | \$0.00 | \$1,575.00 | \$1,575.00 |
| 02490 - Erosion control | | | | | | | | | | | | | |
| | Erosion control allowance: | 1 | Lsum | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$2614 / Lsum | \$0.00 | \$2,614.00 | \$2,614.00 |
| 02570 - Catch basins or manholes | | | | | | | | | | | | | |
| | Cleanout | 2 | Each | \$1,019.00 | \$2,038.00 | \$1,560.00 | \$3,120.00 | \$249.00 | \$498.00 | \$2828 / Each | \$0.00 | \$0.00 | \$5,656.00 |
| | Catch bsns or manholes, curb inlet FR, grate, large 24"x36" heavy | 2 | Each | \$602.88 | \$1,205.76 | \$472.04 | \$944.08 | \$0.00 | \$0.00 | \$1074.92 / Each | \$0.00 | \$0.00 | \$2,149.84 |
| | Junction Structure | 1 | Each | \$680.00 | \$680.00 | \$6,000.00 | \$6,000.00 | \$0.00 | \$0.00 | \$6680 / Each | \$0.00 | \$0.00 | \$6,680.00 |
| 02610 - Asphalt concrete pavement | | | | | | | | | | | | | |
| | Asphaltic conc pavement, pavement replacement over trench, 4" | 672 | Sqyd | \$35.00 | \$23,520.00 | \$18.00 | \$12,096.00 | \$2.98 | \$2,002.56 | \$55.98 / Sqyd | \$0.00 | \$0.00 | \$37,618.56 |
| 02640 - Lines on pav't | | | | | | | | | | | | | |
| | Lines on pvmt, acrylic waterborne, white or yellow, 4" wide | 1100 | Lnft | \$0.12 | \$132.00 | \$0.17 | \$187.00 | \$0.08 | \$88.00 | \$0.37 / Lnft | \$0.00 | \$0.00 | \$407.00 |

| Item | Item Description | Quantity | Unit | Labor \$/Unit | Labor Amount | Materials \$/Unit | Materials Amount | Equip \$/Unit | Equip Amount | Total \$/Unit | Subs Amount | Other Amount | Grand Total |
|------------------------------------|--|----------|------|---------------|--------------------|-------------------|--------------------|---------------|--------------------|----------------|---------------|-------------------|---------------------|
| | | | | | | | | | | | | | |
| 02840 - Landscaping | | | | | | | | | | | | | |
| | Traffic Control Allowance: 2 flaggers, 15' pipe/hr | 1 | Lsum | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$4878 / Lsum | \$0.00 | \$4,878.00 | \$4,878.00 |
| 02900 - Pot Holing | | | | | | | | | | | | | |
| | Pot Holing - pipe lines | 22 | Each | \$250.00 | \$5,500.00 | \$0.00 | \$0.00 | \$35.00 | \$770.00 | \$285 / Each | \$0.00 | \$0.00 | \$6,270.00 |
| | SITE CONSTRUCTION Total | | | | \$53,556.20 | | \$33,531.93 | | \$17,071.10 | | \$0.00 | \$9,067.00 | \$113,226.23 |
| 15 - MECHANICAL | | | | | | | | | | | | | |
| 15090 - Pipe, drng&sewage, concret | | | | | | | | | | | | | |
| | Piping, drainage & sewage, RCP, class 3, no gaskets, 18" dia | 1100 | Lnft | \$18.85 | \$20,735.00 | \$32.00 | \$35,200.00 | \$2.18 | \$2,398.00 | \$53.03 / Lnft | \$0.00 | \$0.00 | \$58,333.00 |
| | Piping, water dist, conc pipe, gasket, 18" dia | 110 | Each | \$3.14 | \$345.40 | \$4.50 | \$495.00 | \$0.00 | \$0.00 | \$7.64 / Each | \$0.00 | \$0.00 | \$840.40 |
| | MECHANICAL Total | | | | \$21,080.40 | | \$35,695.00 | | \$2,398.00 | | \$0.00 | \$0.00 | \$59,173.40 |
| | Project BB-1 Total | | | | \$74,636.60 | | \$69,226.93 | | \$23,909.10 | | \$0.00 | \$9,067.00 | \$176,839.63 |
| | Grand Total | | | | \$74,636.60 | | \$69,226.93 | | \$23,909.10 | | \$0.00 | \$9,067.00 | \$176,839.63 |

| Category | Percent | Amount |
|-------------------------------------|---------|------------------|
| Labor | 42.21% | \$74,637 |
| Material | 39.15% | \$69,227 |
| Equipment | 13.52% | \$23,909 |
| Subcontractor | 0.00% | \$0 |
| Other | 5.13% | \$9,067 |
| Net Costs | | \$176,840 |
| Labor Mark-up | 18.00% | \$13,435 |
| Material Mark-up | 15.00% | \$10,384 |
| Subcontractor Mark-up | 5.00% | \$0 |
| Equipment Mark-up | 15.00% | \$3,586 |
| Sales tax (material) | 7.75% | \$5,365 |
| Sales tax (equipment) | 7.75% | \$1,853 |
| Material Shipping & Handling | 2.50% | \$1,731 |
| Worker's Travel/Subsistence | 0.10% | \$75 |
| Subtotal | | \$213,268 |
| Contractor General Conditions | 12.00% | \$25,592 |
| Subtotal | | \$238,860 |
| Earthquake Insurance | 0.10% | \$239 |
| Subtotal | | \$239,099 |
| Construction Contingency | 25.00% | \$59,775 |
| Subtotal | | \$298,874 |
| Bldg Risk, Liability Auto Ins. | 2.00% | \$5,977 |
| Subtotal | | \$304,851 |
| Performance Bond | 1.00% | \$3,049 |
| Payment Bond | 1.00% | \$3,049 |
| Subtotal | | \$310,948 |
| Engineering Fee | 10.00% | \$17,684 |
| Environmental Permitting (Lump Sum) | - | \$7,000 |
| Total Estimate | | \$335,632 |



City of Carlsbad, Master Drainage Plan

| | |
|--------------------------------|------------------|
| Project Number:: | 128290 |
| Client:: | City of Carlsbad |
| Estimator(s):: | JW / DG |
| Estimating Office:: | Walnut Creek |
| Estimate Issue Number:: | 01 |
| Estimate Original Issue Date:: | 3/14/2006 |
| Estimate Revision Number:: | 04 |
| Estimate Revision Date:: | 6/27/2008 |
| BC Project Manager:: | Chris Herencia |
| Estimate QA/QC Reviewer:: | Bob Ferguson |
| Estimate QA/QC Date:: | 6/27/2008 |

PROJECT LOCATION / PROCESS AREA

Project BB-2

| Item | Item Description | Quantity | Unit | Labor \$/Unit | Labor Amount | Materials \$/Unit | Materials Amount | Equip \$/Unit | Equip Amount | Total \$/Unit | Subs Amount | Other Amount | Grand Total |
|--|--|----------|------|---------------|---------------|-------------------|------------------|---------------|-------------------|------------------|---------------|---------------|-------------------|
| Project BB-2 | | | | | | | | | | | | | |
| 01 - GENERAL REQUIREMENTS | | | | | | | | | | | | | |
| 01200 - General equipment rental | | | | | | | | | | | | | |
| | Trench box, 7200 lbs, 6'x 20' | 23 | Day | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$141.60 | \$3,256.80 | \$141.6 / Day | \$0.00 | \$0.00 | \$3,256.80 |
| | Trench Plates allowance | 1 | Mo | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$900.00 | \$900.00 | \$900 / Mo | \$0.00 | \$0.00 | \$900.00 |
| | GENERAL REQUIREMENTS Total | | | | \$0.00 | | \$0.00 | | \$4,156.80 | | \$0.00 | \$0.00 | \$4,156.80 |
| 02 - SITE CONSTRUCTION | | | | | | | | | | | | | |
| 02020 - Underground marking tape | | | | | | | | | | | | | |
| | Underground tape, detectable aluminum, 2" | 17 | Clf | \$2.34 | \$39.78 | \$3.06 | \$52.02 | \$0.00 | \$0.00 | \$5.4 / Clf | \$0.00 | \$0.00 | \$91.80 |
| 02060 - Site demolition | | | | | | | | | | | | | |
| | Site dml, no hauling, pavement removal, bit, 4" to 6" thick | 1322 | Sqyd | \$5.29 | \$6,993.38 | \$0.00 | \$0.00 | \$3.49 | \$4,613.78 | \$8.78 / Sqyd | \$0.00 | \$0.00 | \$11,607.16 |
| | Asphalt disposal - hauling and disposal fee, 4" thick | 1322 | Sqyd | \$1.00 | \$1,322.00 | \$4.70 | \$6,213.40 | \$1.32 | \$1,745.04 | \$7.02 / Sqyd | \$0.00 | \$0.00 | \$9,280.44 |
| 02170 - Saw cutting | | | | | | | | | | | | | |
| | Saw cutting, asphalt, up to 3" deep | 3414 | Lnft | \$0.48 | \$1,638.72 | \$0.07 | \$238.98 | \$0.26 | \$887.64 | \$0.81 / Lnft | \$0.00 | \$0.00 | \$2,765.34 |
| | Saw cutting, asphalt, after 3" deep; each addl inch of depth | 3414 | Lnft | \$0.82 | \$2,799.48 | \$0.30 | \$1,024.20 | \$0.44 | \$1,502.16 | \$1.56 / Lnft | \$0.00 | \$0.00 | \$5,325.84 |
| 02310 - Fine grade | | | | | | | | | | | | | |
| | Fine grade, fine grade granular base for sidewalks and bikeways | 125 | Sqyd | \$1.06 | \$132.50 | \$0.00 | \$0.00 | \$0.15 | \$18.75 | \$1.21 / Sqyd | \$0.00 | \$0.00 | \$151.25 |
| 02320 - Backfill | | | | | | | | | | | | | |
| | Backfill, dozer backfilling, trench, no compaction | 2640 | Cuyd | \$0.80 | \$2,112.00 | \$0.00 | \$0.00 | \$1.28 | \$3,379.20 | \$2.08 / Cuyd | \$0.00 | \$0.00 | \$5,491.20 |
| 02340 - Bedding | | | | | | | | | | | | | |
| | Bedding, crushed stone 3/4" to 1/2" | 441 | Cuyd | \$8.47 | \$3,735.27 | \$32.03 | \$14,125.23 | \$1.89 | \$833.49 | \$42.39 / Cuyd | \$0.00 | \$0.00 | \$18,693.99 |
| 02360 - Compaction | | | | | | | | | | | | | |
| | Compaction, walk behind, vibrating roller 24" W, 6" lifts, 2 passes | 2640 | Cuyd | \$1.90 | \$5,016.00 | \$0.00 | \$0.00 | \$0.51 | \$1,346.40 | \$2.41 / Cuyd | \$0.00 | \$0.00 | \$6,362.40 |
| | Compaction, rammer tamper, 6" to 11", 4" lifts, 2 passes | 2640 | Cuyd | \$2.93 | \$7,735.20 | \$0.00 | \$0.00 | \$0.78 | \$2,059.20 | \$3.71 / Cuyd | \$0.00 | \$0.00 | \$9,794.40 |
| 02450 - Excavating, trench | | | | | | | | | | | | | |
| | Excavate trench, cont ftg, no sht or dewtrg, 4'-6' D, 1-1/2 CY hyd bac | 3526 | Cuyd | \$1.95 | \$6,875.70 | \$0.00 | \$0.00 | \$1.42 | \$5,006.92 | \$3.37 / Cuyd | \$0.00 | \$0.00 | \$11,882.62 |
| 02460 - Hauling | | | | | | | | | | | | | |
| | Hauling, LCY, no loading, 20 c.y. dump truck, 30 MI RT, 0.33 lds/hr | 886 | Cuyd | \$5.95 | \$5,271.70 | \$0.00 | \$0.00 | \$10.40 | \$9,214.40 | \$16.35 / Cuyd | \$0.00 | \$0.00 | \$14,486.10 |
| | Loading Trucks, F.E. Loader, 3 C.Y.. | 886 | Cuyd | \$0.74 | \$655.64 | \$0.00 | \$0.00 | \$1.24 | \$1,098.64 | \$1.98 / Cuyd | \$0.00 | \$0.00 | \$1,754.28 |
| | Disposal fee | 43 | Trk | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$105 / Trk | \$0.00 | \$4,515.00 | \$4,515.00 |
| 02490 - Erosion control | | | | | | | | | | | | | |
| | Erosion control allowance: | 1 | Lsum | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$2614 / Lsum | \$0.00 | \$2,614.00 | \$2,614.00 |
| 02570 - Catch basins or manholes | | | | | | | | | | | | | |
| | Cleanout | 2 | Each | \$1,019.00 | \$2,038.00 | \$1,560.00 | \$3,120.00 | \$249.00 | \$498.00 | \$2828 / Each | \$0.00 | \$0.00 | \$5,656.00 |
| | Catch bsns or manholes, curb inlet FR, grate, large 24"x36" heavy | 3 | Each | \$602.88 | \$1,808.64 | \$472.04 | \$1,416.12 | \$0.00 | \$0.00 | \$1074.92 / Each | \$0.00 | \$0.00 | \$3,224.76 |
| | Junction Structure | 1 | Each | \$680.00 | \$680.00 | \$6,000.00 | \$6,000.00 | \$0.00 | \$0.00 | \$6680 / Each | \$0.00 | \$0.00 | \$6,680.00 |
| 02610 - Asphalt concrete pavement | | | | | | | | | | | | | |
| | Asphaltic conc pavement, pavement replacement over trench, 4" | 1322 | Sqyd | \$35.00 | \$46,270.00 | \$18.00 | \$23,796.00 | \$2.98 | \$3,939.56 | \$55.98 / Sqyd | \$0.00 | \$0.00 | \$74,005.56 |
| 02640 - Lines on pav't | | | | | | | | | | | | | |
| | Lines on pvmt, acrylic waterborne, white or yellow, 4" wide | 1700 | Lnft | \$0.12 | \$204.00 | \$0.17 | \$289.00 | \$0.08 | \$136.00 | \$0.37 / Lnft | \$0.00 | \$0.00 | \$629.00 |

| Item | Item Description | Quantity | Unit | Labor \$/Unit | Labor Amount | Materials \$/Unit | Materials Amount | Equip \$/Unit | Equip Amount | Total \$/Unit | Subs Amount | Other Amount | Grand Total |
|------------------------------------|--|----------|------|---------------|---------------------|-------------------|---------------------|---------------|--------------------|-----------------|---------------|--------------------|---------------------|
| | | | | | | | | | | | | | |
| 02840 - Landscaping | | | | | | | | | | | | | |
| | Traffic Control Allowance: 2 flaggers, 15' pipe/hr | 1 | Lsum | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$4878 / Lsum | \$0.00 | \$4,878.00 | \$4,878.00 |
| 02900 - Pot Holing | | | | | | | | | | | | | |
| | Pot Holing - pipe lines | 34 | Each | \$250.00 | \$8,500.00 | \$0.00 | \$0.00 | \$35.00 | \$1,190.00 | \$285 / Each | \$0.00 | \$0.00 | \$9,690.00 |
| | SITE CONSTRUCTION Total | | | | \$103,828.01 | | \$56,274.95 | | \$37,469.18 | | \$0.00 | \$12,007.00 | \$209,579.14 |
| 15 - MECHANICAL | | | | | | | | | | | | | |
| 15090 - Pipe, drng&sewage, concret | | | | | | | | | | | | | |
| | Piping, drainage & sewage, RCP, class 3, no gaskets, 36" dia | 1700 | Lnft | \$39.70 | \$67,490.00 | \$73.00 | \$124,100.00 | \$3.94 | \$6,698.00 | \$116.64 / Lnft | \$0.00 | \$0.00 | \$198,288.00 |
| | Piping, water dist, conc pipe, gasket, 36" dia | 170 | Each | \$3.14 | \$533.80 | \$6.50 | \$1,105.00 | \$0.00 | \$0.00 | \$9.64 / Each | \$0.00 | \$0.00 | \$1,638.80 |
| | MECHANICAL Total | | | | \$68,023.80 | | \$125,205.00 | | \$6,698.00 | | \$0.00 | \$0.00 | \$199,926.80 |
| | Project BB-2 Total | | | | \$171,851.81 | | \$181,479.95 | | \$48,323.98 | | \$0.00 | \$12,007.00 | \$413,662.74 |
| | Grand Total | | | | \$171,851.81 | | \$181,479.95 | | \$48,323.98 | | \$0.00 | \$12,007.00 | \$413,662.74 |

| Category | Percent | Amount |
|-------------------------------------|---------|------------------|
| Labor | 41.54% | \$171,852 |
| Material | 43.87% | \$181,480 |
| Equipment | 11.68% | \$48,324 |
| Subcontractor | 0.00% | \$0 |
| Other | 2.90% | \$12,007 |
| Net Costs | | \$413,663 |
| Labor Mark-up | 18.00% | \$30,933 |
| Material Mark-up | 15.00% | \$27,222 |
| Subcontractor Mark-up | 5.00% | \$0 |
| Equipment Mark-up | 15.00% | \$7,249 |
| Sales tax (material) | 7.75% | \$14,065 |
| Sales tax (equipment) | 7.75% | \$3,745 |
| Material Shipping & Handling | 2.50% | \$4,537 |
| Worker's Travel/Subsistence | 0.10% | \$172 |
| Subtotal | | \$501,585 |
| Contractor General Conditions | 12.00% | \$60,190 |
| Subtotal | | \$561,776 |
| Earthquake Insurance | 0.10% | \$562 |
| Subtotal | | \$562,337 |
| Construction Contingency | 20.00% | \$112,467 |
| Subtotal | | \$674,805 |
| Bldg Risk, Liability Auto Ins. | 2.00% | \$13,496 |
| Subtotal | | \$688,301 |
| Performance Bond | 1.00% | \$6,883 |
| Payment Bond | 1.00% | \$6,883 |
| Subtotal | | \$702,067 |
| Engineering Fee | 10.00% | \$41,366 |
| Environmental Permitting (Lump Sum) | - | \$7,000 |
| Total Estimate | | \$750,433 |



City of Carlsbad, Drainage Master Plan

| | |
|--------------------------------|------------------|
| Project Number:: | 128290 |
| Client:: | City of Carlsbad |
| Estimator(s):: | SB / DG |
| Estimating Office:: | Walnut Creek |
| Estimate Issue Number:: | 01 |
| Estimate Original Issue Date:: | 4/18/2006 |
| Estimate Revision Number:: | 04 |
| Estimate Revision Date:: | 6/27/2008 |
| BC Project Manager:: | Chris Herencia |
| Estimate QA/QC Reviewer:: | Butch Matthews |
| Estimate QA/QC Date:: | 6/27/2008 |

PROJECT LOCATION / PROCESS AREA

Project BCA - Located in Basin B

| Item | Item Description | Quantity | Unit | Labor \$/Unit | Labor Amount | Materials \$/Unit | Materials Amount | Equip \$/Unit | Equip Amount | Total \$/Unit | Subs Amount | Other Amount | Grand Total |
|--|---|----------|------|---------------|---------------|-------------------|------------------|---------------|--------------------|------------------|---------------|---------------|--------------------|
| Project BCA | | | | | | | | | | | | | |
| 01 - GENERAL REQUIREMENTS | | | | | | | | | | | | | |
| | Trench box, 9500 lbs, 8'x 20' | 40 | Day | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$240.00 | \$9,600.00 | \$240 / Day | \$0.00 | \$0.00 | \$9,600.00 |
| | Trench Plates allowance | 2 | Mo | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$900.00 | \$1,800.00 | \$900 / Mo | \$0.00 | \$0.00 | \$1,800.00 |
| | GENERAL REQUIREMENTS Total | | | | \$0.00 | | \$0.00 | | \$11,400.00 | | \$0.00 | \$0.00 | \$11,400.00 |
| 02 - SITE CONSTRUCTION | | | | | | | | | | | | | |
| 02020 - Underground marking tape | | | | | | | | | | | | | |
| | Underground tape, detectable aluminum, 2" | 29 | Clf | \$2.34 | \$67.86 | \$3.06 | \$88.74 | \$0.00 | \$0.00 | \$5.4 / Clf | \$0.00 | \$0.00 | \$156.60 |
| 02060 - Site demolition | | | | | | | | | | | | | |
| | Site dml, no hauling, pavement removal, bit, 4" to 6" thick | 1806 | Sqyd | \$5.29 | \$9,553.74 | \$0.00 | \$0.00 | \$3.49 | \$6,302.94 | \$8.78 / Sqyd | \$0.00 | \$0.00 | \$15,856.68 |
| | Asphalt disposal - hauling and disposal fee, 4" thick | 1806 | Sqyd | \$1.00 | \$1,806.00 | \$4.70 | \$8,488.20 | \$1.32 | \$2,383.92 | \$7.02 / Sqyd | \$0.00 | \$0.00 | \$12,678.12 |
| 02170 - Saw cutting | | | | | | | | | | | | | |
| | Saw cutting, asphalt, up to 3" deep | 6600 | Lnft | \$0.48 | \$3,168.00 | \$0.07 | \$462.00 | \$0.26 | \$1,716.00 | \$0.81 / Lnft | \$0.00 | \$0.00 | \$5,346.00 |
| | Saw cutting, asphalt, after 3" deep; each addl inch of depth | 6600 | Lnft | \$0.82 | \$5,412.00 | \$0.30 | \$1,980.00 | \$0.44 | \$2,904.00 | \$1.56 / Lnft | \$0.00 | \$0.00 | \$10,296.00 |
| 02320 - Backfill | | | | | | | | | | | | | |
| | Backfill, dozer backfilling, trench, up to 300' haul, no compaction | 1173 | Cuyd | \$0.80 | \$938.40 | \$0.00 | \$0.00 | \$1.28 | \$1,501.44 | \$2.08 / Cuyd | \$0.00 | \$0.00 | \$2,439.84 |
| 02340 - Bedding | | | | | | | | | | | | | |
| | Bedding, crushed stone 3/4" to 1/2" | 1970 | Cuyd | \$8.47 | \$16,685.90 | \$32.03 | \$63,099.10 | \$1.89 | \$3,723.30 | \$42.39 / Cuyd | \$0.00 | \$0.00 | \$83,508.30 |
| 02360 - Compaction | | | | | | | | | | | | | |
| | Compaction, walk behind, vibrating roller 24" W, 6" lifts, 2 passes | 232 | Cuyd | \$1.90 | \$440.80 | \$0.00 | \$0.00 | \$0.51 | \$118.32 | \$2.41 / Cuyd | \$0.00 | \$0.00 | \$559.12 |
| | Compaction, rammer tamper, 6" to 11", 4" lifts, bedding | 1691 | Cuyd | \$2.93 | \$4,954.63 | \$0.00 | \$0.00 | \$0.78 | \$1,318.98 | \$3.71 / Cuyd | \$0.00 | \$0.00 | \$6,273.61 |
| | Compaction, rammer tamper, 6" to 11", 4" lifts, backfill | 1057 | Cuyd | \$2.93 | \$3,097.01 | \$0.00 | \$0.00 | \$0.78 | \$824.46 | \$3.71 / Cuyd | \$0.00 | \$0.00 | \$3,921.47 |
| 02450 - Excavating, trench | | | | | | | | | | | | | |
| | Excavate trench, common earth curb, 6'-10' deep, 1-1/2 CY hyd | 3075 | Cuyd | \$1.76 | \$5,412.00 | \$0.00 | \$0.00 | \$1.28 | \$3,936.00 | \$3.04 / Cuyd | \$0.00 | \$0.00 | \$9,348.00 |
| 02460 - Hauling | | | | | | | | | | | | | |
| | Hauling, LCY, no loading, 20 c.y. dump truck, 30 MI RT, 0.33 lds/hr | 2670 | Cuyd | \$5.95 | \$15,886.50 | \$0.00 | \$0.00 | \$10.40 | \$27,768.00 | \$16.35 / Cuyd | \$0.00 | \$0.00 | \$43,654.50 |
| | Loading Trucks, F.E. Loader, 3 C.Y.. | 2670 | Cuyd | \$0.74 | \$1,975.80 | \$0.00 | \$0.00 | \$1.24 | \$3,310.80 | \$1.98 / Cuyd | \$0.00 | \$0.00 | \$5,286.60 |
| | Disposal fee | 134 | Trk | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$105 / Trk | \$0.00 | \$14,017.50 | \$14,017.50 |
| 02490 - Erosion control | | | | | | | | | | | | | |
| | Erosion control allowance: | 2 | Lsum | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$2614 / Lsum | \$0.00 | \$5,228.00 | \$5,228.00 |
| 02570 - Catch basins or manholes | | | | | | | | | | | | | |
| | Cleanout | 9 | Each | \$1,019.00 | \$9,171.00 | \$1,560.00 | \$14,040.00 | \$249.00 | \$2,241.00 | \$2828 / Each | \$0.00 | \$0.00 | \$25,452.00 |
| | Catch bsns or manholes, curb inlet FR, grate, large 24"x36" heavy | 8 | Each | \$602.88 | \$4,823.04 | \$472.04 | \$3,776.32 | \$0.00 | \$0.00 | \$1074.92 / Each | \$0.00 | \$0.00 | \$8,599.36 |
| | Junction Structure | 2 | Each | \$680.00 | \$1,360.00 | \$6,000.00 | \$12,000.00 | \$0.00 | \$0.00 | \$6680 / Each | \$0.00 | \$0.00 | \$13,360.00 |
| 02600 - Base course | | | | | | | | | | | | | |
| | Base course, large areas, crushed 3/4" stone, compacted to 9" deep | 1806 | Sqyd | \$0.80 | \$1,444.80 | \$8.06 | \$14,556.36 | \$1.02 | \$1,842.12 | \$9.88 / Sqyd | \$0.00 | \$0.00 | \$17,843.28 |
| 02610 - Asphalt concrete pavement | | | | | | | | | | | | | |
| | Asphaltic conc pavement, pavement replacement over trench, 4" | 1806 | Sqyd | \$35.00 | \$63,210.00 | \$18.00 | \$32,508.00 | \$2.98 | \$5,381.88 | \$55.98 / Sqyd | \$0.00 | \$0.00 | \$101,099.88 |

| Item | Item Description | Quantity | Unit | Labor \$/Unit | Labor Amount | Materials \$/Unit | Materials Amount | Equip \$/Unit | Equip Amount | Total \$/Unit | Subs Amount | Other Amount | Grand Total |
|------------------------|--|----------|------|---------------|---------------------|-------------------|---------------------|---------------|--------------------|----------------|---------------|--------------------|---------------------|
| 02640 - Lines on pav't | | | | | | | | | | | | | |
| | Lines on pvmt, acrylic waterborne, white or yellow, 4" wide | 3300 | Lnft | \$0.12 | \$396.00 | \$0.17 | \$561.00 | \$0.08 | \$264.00 | \$0.37 / Lnft | \$0.00 | \$0.00 | \$1,221.00 |
| 02840 - Landscaping | | | | | | | | | | | | | |
| | Traffic Control Allowance: 2 flaggers, 15' pipe/hr | 2 | Lsum | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$4878 / Lsum | \$0.00 | \$9,756.00 | \$9,756.00 |
| | | | | | | | | | | | | | |
| | SITE CONSTRUCTION Total | | | | \$149,803.48 | | \$151,559.72 | | \$65,537.16 | | \$0.00 | \$29,001.50 | \$395,901.86 |
| 15 - MECHANICAL | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | Piping, drainage & sewage, RCP, class 3, no gaskets, 24" dia | 2900 | Lnft | \$24.50 | \$71,050.00 | \$35.00 | \$101,500.00 | \$2.84 | \$8,236.00 | \$62.34 / Lnft | \$0.00 | \$0.00 | \$180,786.00 |
| | Piping, water dist, conc pipe, gasket, 24" dia | 290 | Each | \$3.14 | \$910.60 | \$4.75 | \$1,377.50 | \$0.00 | \$0.00 | \$7.89 / Each | \$0.00 | \$0.00 | \$2,288.10 |
| | | | | | | | | | | | | | |
| | MECHANICAL Total | | | | \$71,960.60 | | \$102,877.50 | | \$8,236.00 | | \$0.00 | \$0.00 | \$183,074.10 |
| | | | | | | | | | | | | | |
| | Project BCA total | | | | \$221,764.08 | | \$254,437.22 | | \$85,173.16 | | \$0.00 | \$29,001.50 | \$590,375.96 |
| | | | | | | | | | | | | | |
| | Grand Total | | | | \$221,764.08 | | \$254,437.22 | | \$85,173.16 | | \$0.00 | \$29,001.50 | \$590,375.96 |

| Category | Percent | Amount |
|-------------------------------------|---------|--------------------|
| Labor | 37.56% | \$221,764 |
| Material | 43.10% | \$254,437 |
| Equipment | 14.43% | \$85,173 |
| Subcontractor | 0.00% | \$0 |
| Other | 4.91% | \$29,002 |
| Net Costs | | \$590,376 |
| Labor Mark-up | 18.00% | \$39,918 |
| Material Mark-up | 15.00% | \$38,166 |
| Subcontractor Mark-up | 5.00% | \$0 |
| Equipment Mark-up | 15.00% | \$12,776 |
| Sales tax (material) | 7.75% | \$19,719 |
| Sales tax (equipment) | 7.75% | \$6,601 |
| Material Shipping & Handling | 2.50% | \$6,361 |
| Worker's Travel/Subsistence | 0.10% | \$222 |
| Subtotal | | \$714,138 |
| Contractor General Conditions | 12.00% | \$85,697 |
| Subtotal | | \$799,834 |
| Earthquake Insurance | 0.10% | \$800 |
| Subtotal | | \$800,634 |
| Construction Contingency | 20.00% | \$160,127 |
| Subtotal | | \$960,761 |
| Bldg Risk, Liability Auto Ins. | 2.00% | \$19,215 |
| Subtotal | | \$979,976 |
| Performance Bond | 1.00% | \$9,800 |
| Payment Bond | 1.00% | \$9,800 |
| Subtotal | | \$999,575 |
| Engineering Fee | 10.00% | \$59,038 |
| Environmental Permitting (Lump Sum) | - | \$10,000 |
| Total Estimate | | \$1,068,613 |



City of Carlsbad, Master Drainage Plan

| | |
|--------------------------------|------------------|
| Project Number:: | 128290 |
| Client:: | City of Carlsbad |
| Estimator(s):: | JW / DG |
| Estimating Office:: | Walnut Creek |
| Estimate Issue Number:: | 01 |
| Estimate Original Issue Date:: | |
| Estimate Revision Number:: | 04 |
| Estimate Revision Date:: | 6/27/2008 |
| BC Project Manager:: | Chris Herencia |
| Estimate QA/QC Reviewer:: | Bob Ferguson |
| Estimate QA/QC Date:: | 6/27/2008 |

PROJECT LOCATION / PROCESS AREA

Project BCB

| Item | Item Description | Quantity | Unit | Labor \$/Unit | Labor Amount | Materials \$/Unit | Materials Amount | Equip \$/Unit | Equip Amount | Total \$/Unit | Subs Amount | Other Amount | Grand Total |
|--|---|----------|------|---------------|---------------|-------------------|------------------|---------------|-------------------|------------------|---------------|---------------|-------------------|
| Project BCB | | | | | | | | | | | | | |
| 01 - GENERAL REQUIREMENTS | | | | | | | | | | | | | |
| 01200 - General equipment rental | | | | | | | | | | | | | |
| | Trench box, 9500 lbs, 8'x 20' | 12 | Day | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$240.00 | \$2,880.00 | \$240 / Day | \$0.00 | \$0.00 | \$2,880.00 |
| | Trench Plates allowance | 1 | Mo | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$900.00 | \$900.00 | \$900 / Mo | \$0.00 | \$0.00 | \$900.00 |
| | GENERAL REQUIREMENTS Total | | | | \$0.00 | | \$0.00 | | \$3,780.00 | | \$0.00 | \$0.00 | \$3,780.00 |
| 02 - SITE CONSTRUCTION | | | | | | | | | | | | | |
| 02020 - Underground marking tape | | | | | | | | | | | | | |
| | Underground tape, detectable aluminum, 2" | 9.25 | Clf | \$2.34 | \$21.65 | \$3.06 | \$28.31 | \$0.00 | \$0.00 | \$5.4 / Clf | \$0.00 | \$0.00 | \$49.95 |
| 02060 - Site demolition | | | | | | | | | | | | | |
| | Site dml, no hauling, pavement removal, bit, 4" to 6" thick | 620 | Sqyd | \$5.29 | \$3,279.80 | \$0.00 | \$0.00 | \$3.49 | \$2,163.80 | \$8.78 / Sqyd | \$0.00 | \$0.00 | \$5,443.60 |
| | Asphalt disposal - hauling and disposal fee, 4" thick | 620 | Sqyd | \$1.00 | \$620.00 | \$4.70 | \$2,914.00 | \$1.32 | \$818.40 | \$7.02 / Sqyd | \$0.00 | \$0.00 | \$4,352.40 |
| 02170 - Saw cutting | | | | | | | | | | | | | |
| | Saw cutting, asphalt, up to 3" deep | 1,859.00 | Lnft | \$0.48 | \$892.32 | \$0.07 | \$130.13 | \$0.26 | \$483.34 | \$0.81 / Lnft | \$0.00 | \$0.00 | \$1,505.79 |
| | Saw cutting, asphalt, after 3" deep; each addl inch of depth | 1,859.00 | Lnft | \$0.82 | \$1,524.38 | \$0.30 | \$557.70 | \$0.44 | \$817.96 | \$1.56 / Lnft | \$0.00 | \$0.00 | \$2,900.04 |
| 02310 - Fine grade | | | | | | | | | | | | | |
| | Fine grade under asphalt | 620 | Sqyd | \$0.26 | \$161.20 | \$0.00 | \$0.00 | \$0.21 | \$130.20 | \$0.47 / Sqyd | \$0.00 | \$0.00 | \$291.40 |
| 02340 - Bedding | | | | | | | | | | | | | |
| | Bedding, crushed stone 3/4" to 1/2" | 628 | Cuyd | \$8.47 | \$5,319.16 | \$32.03 | \$20,114.84 | \$1.89 | \$1,186.92 | \$42.39 / Cuyd | \$0.00 | \$0.00 | \$26,620.92 |
| | Backfill, dozer backfilling, trench, no compaction | 628 | Cuyd | \$0.80 | \$502.40 | \$0.00 | \$0.00 | \$1.28 | \$803.84 | \$2.08 / Cuyd | \$0.00 | \$0.00 | \$1,306.24 |
| 02360 - Compaction | | | | | | | | | | | | | |
| | Backfill Compaction, walk behind, vibrating roller 24" W, 6" lifts, 2 | 565.3 | Cuyd | \$1.72 | \$972.32 | \$0.00 | \$0.00 | \$0.41 | \$231.77 | \$2.13 / Cuyd | \$0.00 | \$0.00 | \$1,204.09 |
| | Subgrade Compaction, rammer tamper, 6" to 11", 4" lifts, 2 passes | 94.2 | Cuyd | \$2.93 | \$276.01 | \$0.00 | \$0.00 | \$0.78 | \$73.48 | \$3.71 / Cuyd | \$0.00 | \$0.00 | \$349.48 |
| | Bedding Compaction, rammer tamper, 6" to 11", 4" lifts, 2 passes | 585.5 | Cuyd | \$2.93 | \$1,715.52 | \$0.00 | \$0.00 | \$0.78 | \$456.69 | \$3.71 / Cuyd | \$0.00 | \$0.00 | \$2,172.21 |
| 02450 - Excavating, trench | | | | | | | | | | | | | |
| | Excavate trench, common earth curb, 6'-10' deep, 1-1/2 CY hyd | 1,319.00 | Cuyd | \$1.76 | \$2,321.44 | \$0.00 | \$0.00 | \$1.28 | \$1,688.32 | \$3.04 / Cuyd | \$0.00 | \$0.00 | \$4,009.76 |
| 02460 - Hauling | | | | | | | | | | | | | |
| | Hauling, LCY, no loading, 12 c.y. dump truck, 20 MI RT, 0.4 lds/hr | 1,517.00 | Cuyd | \$7.18 | \$10,892.06 | \$3.00 | \$4,551.00 | \$15.45 | \$23,432.02 | \$25.63 / Cuyd | \$0.00 | \$0.00 | \$38,875.08 |
| | Loading Trucks, F.E. Loader, 3 C.Y.. | 1,517.00 | Cuyd | \$0.74 | \$1,122.58 | \$0.00 | \$0.00 | \$1.24 | \$1,881.08 | \$1.98 / Cuyd | \$0.00 | \$0.00 | \$3,003.66 |
| | Disposal fee | 76 | Trk | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$105 / Trk | \$0.00 | \$7,964.25 | \$7,964.25 |
| 02490 - Erosion control | | | | | | | | | | | | | |
| | Erosion control allowance: | 1 | Lsum | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$2614 / Lsum | \$0.00 | \$2,614.00 | \$2,614.00 |
| 02570 - Catch basins or manholes | | | | | | | | | | | | | |
| | Catch basins or manholes, concrete, precast, 5' I.D., 8' deep | 4 | Each | \$846.67 | \$3,386.68 | \$1,475.00 | \$5,900.00 | \$189.01 | \$756.04 | \$2510.68 / Each | \$0.00 | \$0.00 | \$10,042.72 |
| | Cleanout | 3 | Each | \$1,019.00 | \$3,057.00 | \$1,560.00 | \$4,680.00 | \$249.00 | \$747.00 | \$2828 / Each | \$0.00 | \$0.00 | \$8,484.00 |
| | CB or manholes, conc, slab tops, precast, 8" thick, 5' dia | 4 | Each | \$169.33 | \$677.32 | \$395.00 | \$1,580.00 | \$37.80 | \$151.20 | \$602.13 / Each | \$0.00 | \$0.00 | \$2,408.52 |
| | Catch bsns or manholes, frs and covs, hvy traffic, 24" diam, 400 lb. | 4 | Each | \$162.82 | \$651.28 | \$260.00 | \$1,040.00 | \$36.35 | \$145.40 | \$459.17 / Each | \$0.00 | \$0.00 | \$1,836.68 |
| | CB or manholes, inverts, single channel brick, concrete | 4 | Each | \$144.00 | \$576.00 | \$100.00 | \$400.00 | \$0.00 | \$0.00 | \$244 / Each | \$0.00 | \$0.00 | \$976.00 |
| | CB/manholes, steps, heavyweight cast iron, 12" x 10-1/2", for all con | 16 | Each | \$9.66 | \$154.56 | \$23.00 | \$368.00 | \$0.00 | \$0.00 | \$32.66 / Each | \$0.00 | \$0.00 | \$522.56 |
| 02610 - Asphalt concrete pavement | | | | | | | | | | | | | |
| | Asphaltic conc pavement, pavement replacement over trench, 4" | 620 | Sqyd | \$35.00 | \$21,700.00 | \$18.00 | \$11,160.00 | \$2.98 | \$1,847.60 | \$55.98 / Sqyd | \$0.00 | \$0.00 | \$34,707.60 |

| Item | Item Description | Quantity | Unit | Labor \$/Unit | Labor Amount | Materials \$/Unit | Materials Amount | Equip \$/Unit | Equip Amount | Total \$/Unit | Subs Amount | Other Amount | Grand Total |
|---|---|----------|------|---------------|--------------------|-------------------|--------------------|---------------|--------------------|-----------------|-------------------|--------------------|---------------------|
| <i>02640 - Lines on pav't</i> | | | | | | | | | | | | | |
| | Lines on pvmt, acrylic waterborne, white or yellow, 4" wide | 925 | Lnft | \$0.12 | \$111.00 | \$0.17 | \$157.25 | \$0.08 | \$74.00 | \$0.37 / Lnft | \$0.00 | \$0.00 | \$342.25 |
| <i>02840 - Landscaping</i> | | | | | | | | | | | | | |
| | Landscaping Allowance | 1 | Lsum | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$5000 / Lsum | \$5,000.00 | \$0.00 | \$5,000.00 |
| | Traffic Control Allowance: 2 flaggers, 15' pipe/hr | 1 | Lsum | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$4878 / Lsum | \$0.00 | \$4,878.00 | \$4,878.00 |
| <i>02900 - Pot Holing</i> | | | | | | | | | | | | | |
| | Pot Holing - pipe lines: 2 per 100' | 18 | Each | \$250.00 | \$4,500.00 | \$0.00 | \$0.00 | \$35.00 | \$630.00 | \$285 / Each | \$0.00 | \$0.00 | \$5,130.00 |
| | <i>SITE CONSTRUCTION Total</i> | | | | <i>\$64,434.66</i> | | <i>\$53,581.23</i> | | <i>\$38,519.06</i> | | <i>\$5,000.00</i> | <i>\$15,456.25</i> | <i>\$176,991.19</i> |
| <i>03 - CONCRETE</i> | | | | | | | | | | | | | |
| <i>03330 - Patching concrete</i> | | | | | | | | | | | | | |
| | Patching conc, wall, wall penetration, non-shrink grout, 30" hole | 8 | Each | \$75.38 | \$603.04 | \$238.50 | \$1,908.00 | \$0.00 | \$0.00 | \$313.88 / Each | \$0.00 | \$0.00 | \$2,511.04 |
| | <i>CONCRETE Total</i> | | | | <i>\$603.04</i> | | <i>\$1,908.00</i> | | <i>\$0.00</i> | | <i>\$0.00</i> | <i>\$0.00</i> | <i>\$2,511.04</i> |
| <i>15 - MECHANICAL</i> | | | | | | | | | | | | | |
| <i>15090 - Pipe, drng&sewage, concret</i> | | | | | | | | | | | | | |
| | Piping, drainage & sewage, RCP, class 3, no gaskets, 30" dia | 925 | Lnft | \$32.48 | \$30,044.00 | \$43.00 | \$39,775.00 | \$3.22 | \$2,978.50 | \$78.7 / Lnft | \$0.00 | \$0.00 | \$72,797.50 |
| | Piping, water dist, conc pipe, gasket, 30" dia | 92 | Each | \$3.14 | \$288.88 | \$6.00 | \$552.00 | \$0.00 | \$0.00 | \$9.14 / Each | \$0.00 | \$0.00 | \$840.88 |
| | <i>MECHANICAL Total</i> | | | | <i>\$30,332.88</i> | | <i>\$40,327.00</i> | | <i>\$2,978.50</i> | | <i>\$0.00</i> | <i>\$0.00</i> | <i>\$73,638.38</i> |
| | <i>Project BCB Total</i> | | | | <i>\$95,370.58</i> | | <i>\$95,816.23</i> | | <i>\$45,277.56</i> | | <i>\$5,000.00</i> | <i>\$15,456.25</i> | <i>\$256,920.61</i> |
| Grand Total | | | | | \$95,370.58 | | \$95,816.23 | | \$45,277.56 | | \$5,000.00 | \$15,456.25 | \$256,920.61 |

| Category | Percent | Amount |
|-------------------------------------|---------|------------------|
| Labor | 37.12% | \$95,371 |
| Material | 37.29% | \$95,816 |
| Equipment | 17.62% | \$45,278 |
| Subcontractor | 1.95% | \$5,000 |
| Other | 6.02% | \$15,456 |
| Net Costs | | \$256,921 |
| Labor Mark-up | 18.00% | \$17,167 |
| Material Mark-up | 15.00% | \$14,372 |
| Subcontractor Mark-up | 5.00% | \$250 |
| Equipment Mark-up | 15.00% | \$6,792 |
| Sales tax (material) | 7.75% | \$7,426 |
| Sales tax (equipment) | 7.75% | \$3,509 |
| Material Shipping & Handling | 2.50% | \$2,395 |
| Worker's Travel/Subsistence | 0.10% | \$95 |
| Subtotal | | \$308,927 |
| Contractor General Conditions | 12.00% | \$37,071 |
| Subtotal | | \$345,998 |
| Earthquake Insurance | 0.10% | \$346 |
| Subtotal | | \$346,344 |
| Construction Contingency | 20.00% | \$69,269 |
| Subtotal | | \$415,613 |
| Bldg Risk, Liability Auto Ins. | 2.00% | \$8,312 |
| Subtotal | | \$423,925 |
| Performance Bond | 1.00% | \$4,239 |
| Payment Bond | 1.00% | \$4,239 |
| Subtotal | | \$432,404 |
| Engineering Fee | 10.00% | \$25,692 |
| Environmental Permitting (Lump Sum) | - | \$10,000 |
| Total Estimate | | \$468,096 |



City of Carlsbad, Master Drainage Plan

| | |
|--------------------------------|------------------|
| Project Number:: | 128290 |
| Client:: | City of Carlsbad |
| Estimator(s):: | JW / DG |
| Estimating Office:: | Walnut Creek |
| Estimate Issue Number:: | 01 |
| Estimate Original Issue Date:: | 3/14/2006 |
| Estimate Revision Number:: | 04 |
| Estimate Revision Date:: | 6/27/2008 |
| BC Project Manager:: | Chris Herencia |
| Estimate QA/QC Reviewer:: | Butch Matthews |
| Estimate QA/QC Date:: | 6/27/2008 |

PROJECT LOCATION / PROCESS AREA

Project BCC - Located in Basin B

| Item | Item Description | Quantity | Unit | Labor \$/Unit | Labor Amount | Materials \$/Unit | Materials Amount | Equip \$/Unit | Equip Amount | Total \$/Unit | Subs Amount | Other Amount | Grand Total |
|--|---|----------|------|---------------|---------------|-------------------|------------------|---------------|-------------------|------------------|---------------|---------------|-------------------|
| Project BCC | | | | | | | | | | | | | |
| 01 - GENERAL REQUIREMENTS | | | | | | | | | | | | | |
| 01200 - General equipment rental | | | | | | | | | | | | | |
| | Trench box, 9500 lbs, 8'x 20' | 12 | Day | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$240.00 | \$2,880.00 | \$240 / Day | \$0.00 | \$0.00 | \$2,880.00 |
| | Trench Plates allowance | 1 | Mo | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$900.00 | \$900.00 | \$900 / Mo | \$0.00 | \$0.00 | \$900.00 |
| | GENERAL REQUIREMENTS Total | | | | \$0.00 | | \$0.00 | | \$3,780.00 | | \$0.00 | \$0.00 | \$3,780.00 |
| 02 - SITE CONSTRUCTION | | | | | | | | | | | | | |
| 02020 - Underground marking tape | | | | | | | | | | | | | |
| | Underground tape, detectable aluminum, 2" | 9.25 | Clf | \$2.34 | \$21.65 | \$3.06 | \$28.31 | \$0.00 | \$0.00 | \$5.4 / Clf | \$0.00 | \$0.00 | \$49.95 |
| 02060 - Site demolition | | | | | | | | | | | | | |
| | Site dml, no hauling, pavement removal, bit, 4" to 6" thick | 620 | Sqyd | \$5.29 | \$3,279.80 | \$0.00 | \$0.00 | \$3.49 | \$2,163.80 | \$8.78 / Sqyd | \$0.00 | \$0.00 | \$5,443.60 |
| | Asphalt disposal - hauling and disposal fee, 4" thick | 620 | Sqyd | \$1.00 | \$620.00 | \$4.70 | \$2,914.00 | \$1.32 | \$818.40 | \$7.02 / Sqyd | \$0.00 | \$0.00 | \$4,352.40 |
| 02170 - Saw cutting | | | | | | | | | | | | | |
| | Saw cutting, asphalt, up to 3" deep | 1,859.0 | Lnft | \$0.48 | \$892.32 | \$0.07 | \$130.13 | \$0.26 | \$483.34 | \$0.81 / Lnft | \$0.00 | \$0.00 | \$1,505.79 |
| | Saw cutting, asphalt, after 3" deep; each addl inch of depth | 1,859.00 | Lnft | \$0.82 | \$1,524.38 | \$0.30 | \$557.70 | \$0.44 | \$817.96 | \$1.56 / Lnft | \$0.00 | \$0.00 | \$2,900.04 |
| 02310 - Fine grade | | | | | | | | | | | | | |
| | Fine grade under asphalt | 620 | Sqyd | \$0.26 | \$161.20 | \$0.00 | \$0.00 | \$0.21 | \$130.20 | \$0.47 / Sqyd | \$0.00 | \$0.00 | \$291.40 |
| 02340 - Bedding | | | | | | | | | | | | | |
| | Bedding, crushed stone 3/4" to 1/2" | 911.4 | Cuyd | \$8.47 | \$7,719.56 | \$32.03 | \$29,192.14 | \$1.89 | \$1,722.55 | \$42.39 / Cuyd | \$0.00 | \$0.00 | \$38,634.25 |
| | Backfill, dozer backfilling, trench, no compaction | 1463 | Cuyd | \$0.80 | \$1,170.40 | \$0.00 | \$0.00 | \$1.28 | \$1,872.64 | \$2.08 / Cuyd | \$0.00 | \$0.00 | \$3,043.04 |
| 02360 - Compaction | | | | | | | | | | | | | |
| | Backfill Compaction, walk behind, vibrating roller 24" W, 6" lifts, 2 | 668.1 | Cuyd | \$1.72 | \$1,149.13 | \$0.00 | \$0.00 | \$0.41 | \$273.92 | \$2.13 / Cuyd | \$0.00 | \$0.00 | \$1,423.05 |
| | Subgrade Compaction, rammer tamper, 6" to 11", 4" lifts, 2 passes | 111.3 | Cuyd | \$2.93 | \$326.11 | \$0.00 | \$0.00 | \$0.78 | \$86.81 | \$3.71 / Cuyd | \$0.00 | \$0.00 | \$412.92 |
| | Bedding Compaction, rammer tamper, 6" to 11", 4" lifts, 2 passes | 783.8 | Cuyd | \$2.93 | \$2,296.53 | \$0.00 | \$0.00 | \$0.78 | \$611.36 | \$3.71 / Cuyd | \$0.00 | \$0.00 | \$2,907.90 |
| 02450 - Excavating, trench | | | | | | | | | | | | | |
| | Excavate trench, common earth curb, 6'-10' deep, 1-1/2 CY hyd | 1900 | Cuyd | \$1.76 | \$3,344.00 | \$0.00 | \$0.00 | \$1.28 | \$2,432.00 | \$3.04 / Cuyd | \$0.00 | \$0.00 | \$5,776.00 |
| 02460 - Hauling | | | | | | | | | | | | | |
| | Hauling, LCY, no loading, 12 c.y. dump truck, 20 MI RT, 0.4 lds/hr | 627 | Cuyd | \$7.18 | \$4,501.86 | \$3.00 | \$1,881.00 | \$15.45 | \$9,684.82 | \$25.63 / Cuyd | \$0.00 | \$0.00 | \$16,067.68 |
| | Loading Trucks, F.E. Loader, 3 C.Y.. | 627 | Cuyd | \$0.74 | \$463.98 | \$0.00 | \$0.00 | \$1.24 | \$777.48 | \$1.98 / Cuyd | \$0.00 | \$0.00 | \$1,241.46 |
| | Disposal fee | 31 | Trk | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$105 / Trk | \$0.00 | \$3,291.75 | \$3,291.75 |
| 02490 - Erosion control | | | | | | | | | | | | | |
| | Erosion control allowance: | 1 | Lsum | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$2614 / Lsum | \$0.00 | \$2,614.00 | \$2,614.00 |
| 02570 - Catch basins or manholes | | | | | | | | | | | | | |
| | Catch basins or manholes, concrete, precast, 5' I.D., 8' deep | 4 | Each | \$846.67 | \$3,386.68 | \$1,475.00 | \$5,900.00 | \$189.01 | \$756.04 | \$2510.68 / Each | \$0.00 | \$0.00 | \$10,042.72 |
| | Cleanout | 3 | Each | \$1,019.00 | \$3,057.00 | \$1,560.00 | \$4,680.00 | \$249.00 | \$747.00 | \$2828 / Each | \$0.00 | \$0.00 | \$8,484.00 |
| | CB or manholes, conc, slab tops, precast, 8" thick, 5' dia | 4 | Each | \$169.33 | \$677.32 | \$395.00 | \$1,580.00 | \$37.80 | \$151.20 | \$602.13 / Each | \$0.00 | \$0.00 | \$2,408.52 |
| | Catch bsns or manholes, frs and covs, hvy traffic, 24" diam, 400 lb. | 4 | Each | \$162.82 | \$651.28 | \$260.00 | \$1,040.00 | \$36.35 | \$145.40 | \$459.17 / Each | \$0.00 | \$0.00 | \$1,836.68 |
| | CB or manholes, inverts, single channel brick, concrete | 4 | Each | \$144.00 | \$576.00 | \$100.00 | \$400.00 | \$0.00 | \$0.00 | \$244 / Each | \$0.00 | \$0.00 | \$976.00 |
| | CB/manholes, steps, heavyweight cast iron, 12" x 10-1/2", for all con | 16 | Each | \$9.66 | \$154.56 | \$23.00 | \$368.00 | \$0.00 | \$0.00 | \$32.66 / Each | \$0.00 | \$0.00 | \$522.56 |
| 02610 - Asphalt concrete pavement | | | | | | | | | | | | | |
| | Asphaltic conc pavement, pavement replacement over trench, 4" | 620 | Sqyd | \$35.00 | \$21,700.00 | \$18.00 | \$11,160.00 | \$2.98 | \$1,847.60 | \$55.98 / Sqyd | \$0.00 | \$0.00 | \$34,707.60 |

| Item | Item Description | Quantity | Unit | Labor \$/Unit | Labor Amount | Materials \$/Unit | Materials Amount | Equip \$/Unit | Equip Amount | Total \$/Unit | Subs Amount | Other Amount | Grand Total |
|---|--|----------|------|---------------|--------------------|-------------------|---------------------|---------------|--------------------|-----------------|-------------------|--------------------|---------------------|
| <i>02640 - Lines on pav't</i> | | | | | | | | | | | | | |
| | Lines on pvmt, acrylic waterborne, white or yellow, 4" wide | 925 | Lnft | \$0.12 | \$111.00 | \$0.17 | \$157.25 | \$0.08 | \$74.00 | \$0.37 / Lnft | \$0.00 | \$0.00 | \$342.25 |
| <i>02840 - Landscaping</i> | | | | | | | | | | | | | |
| | Landscaping Allowance | 1 | Lsum | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$5000 / Lsum | \$5,000.00 | \$0.00 | \$5,000.00 |
| | Traffic Control Allowance: 2 flaggers, 15' pipe/hr | 1 | Lsum | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$4878 / Lsum | \$0.00 | \$4,878.00 | \$4,878.00 |
| <i>02900 - Pot Holing</i> | | | | | | | | | | | | | |
| | Pot Holing - pipe lines: 2 per 100' | 18 | Each | \$250.00 | \$4,500.00 | \$0.00 | \$0.00 | \$35.00 | \$630.00 | \$285 / Each | \$0.00 | \$0.00 | \$5,130.00 |
| | <i>SITE CONSTRUCTION Total</i> | | | | <i>\$62,284.76</i> | | <i>\$59,988.53</i> | | <i>\$26,226.53</i> | | <i>\$5,000.00</i> | <i>\$10,783.75</i> | <i>\$164,283.56</i> |
| <i>03 - CONCRETE</i> | | | | | | | | | | | | | |
| <i>03330 - Patching concrete</i> | | | | | | | | | | | | | |
| | Patching conc, wall, wall penetration, non-shrink grout, | 8 | Each | \$75.38 | \$603.04 | \$286.20 | \$2,289.60 | \$0.00 | \$0.00 | \$361.58 / Each | \$0.00 | \$0.00 | \$2,892.64 |
| | <i>CONCRETE Total</i> | | | | <i>\$603.04</i> | | <i>\$2,289.60</i> | | <i>\$0.00</i> | | <i>\$0.00</i> | <i>\$0.00</i> | <i>\$2,892.64</i> |
| <i>15 - MECHANICAL</i> | | | | | | | | | | | | | |
| <i>15090 - Pipe, drng&sewage, concret</i> | | | | | | | | | | | | | |
| | Piping, drainage & sewage, RCP, class 3, no gaskets, 36" dia | 925 | Lnft | \$39.70 | \$36,722.50 | \$73.00 | \$67,525.00 | \$3.94 | \$3,644.50 | \$116.64 / Lnft | \$0.00 | \$0.00 | \$107,892.00 |
| | Piping, water dist, conc pipe, gasket, 36" dia | 92 | Each | \$3.14 | \$288.88 | \$6.50 | \$598.00 | \$0.00 | \$0.00 | \$9.64 / Each | \$0.00 | \$0.00 | \$886.88 |
| | <i>MECHANICAL Total</i> | | | | <i>\$37,011.38</i> | | <i>\$68,123.00</i> | | <i>\$3,644.50</i> | | <i>\$0.00</i> | <i>\$0.00</i> | <i>\$108,778.88</i> |
| | <i>Project BCC Total</i> | | | | <i>\$99,899.18</i> | | <i>\$130,401.13</i> | | <i>\$33,651.03</i> | | <i>\$5,000.00</i> | <i>\$10,783.75</i> | <i>\$279,735.08</i> |
| | <i>Grand Total</i> | | | | <i>\$99,899.18</i> | | <i>\$130,401.13</i> | | <i>\$33,651.03</i> | | <i>\$5,000.00</i> | <i>\$10,783.75</i> | <i>\$279,735.08</i> |

| Category | Percent | Amount |
|-------------------------------------|---------|------------------|
| Labor | 35.71% | \$99,899 |
| Material | 46.62% | \$130,401 |
| Equipment | 12.03% | \$33,651 |
| Subcontractor | 1.79% | \$5,000 |
| Other | 3.85% | \$10,784 |
| Net Costs | | \$279,735 |
| Labor Mark-up | 18.00% | \$17,982 |
| Material Mark-up | 15.00% | \$19,560 |
| Subcontractor Mark-up | 5.00% | \$250 |
| Equipment Mark-up | 15.00% | \$5,048 |
| Sales tax (material) | 7.75% | \$10,106 |
| Sales tax (equipment) | 7.75% | \$2,608 |
| Material Shipping & Handling | 2.50% | \$3,260 |
| Worker's Travel/Subsistence | 0.10% | \$100 |
| Subtotal | | \$338,649 |
| Contractor General Conditions | 12.00% | \$40,638 |
| Subtotal | | \$379,287 |
| Earthquake Insurance | 0.10% | \$379 |
| Subtotal | | \$379,666 |
| Construction Contingency | 20.00% | \$75,933 |
| Subtotal | | \$455,599 |
| Bldg Risk, Liability Auto Ins. | 2.00% | \$9,112 |
| Subtotal | | \$464,711 |
| Performance Bond | 1.00% | \$4,647 |
| Payment Bond | 1.00% | \$4,647 |
| Subtotal | | \$474,005 |
| Engineering Fee | 10.00% | \$27,974 |
| Environmental Permitting (Lump Sum) | - | \$10,000 |
| Total Estimate | | \$511,979 |



City of Carlsbad, Drainage Master Plan

| | |
|--------------------------------|------------------|
| Project Number:: | 128290 |
| Client:: | City of Carlsbad |
| Estimator(s):: | JW / DG |
| Estimating Office:: | Walnut Creek |
| Estimate Issue Number:: | 01 |
| Estimate Original Issue Date:: | 3/14/2006 |
| Estimate Revision Number:: | 04 |
| Estimate Revision Date:: | 6/27/2008 |
| BC Project Manager:: | Chris Herencia |
| Estimate QA/QC Reviewer:: | Butch Matthews |
| Estimate QA/QC Date:: | 6/27/2008 |

PROJECT LOCATION / PROCESS AREA

Project BFA - Located in Basin B

| Item | Item Description | Quantity | Unit | Labor \$/Unit | Labor Amount | Materials \$/Unit | Materials Amount | Equip \$/Unit | Equip Amount | Total \$/Unit | Subs Amount | Other Amount | Grand Total |
|---|---|----------|------|---------------|---------------|-------------------|------------------|---------------|-------------------|------------------|---------------|---------------|-------------------|
| Project BFA | | | | | | | | | | | | | |
| 01 - GENERAL REQUIREMENTS | | | | | | | | | | | | | |
| 01200 - General equipment rental | | | | | | | | | | | | | |
| | Trench box, 9500 lbs, 8'x 20' | 20 | Day | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$240.00 | \$4,800.00 | \$240 / Day | \$0.00 | \$0.00 | \$4,800.00 |
| | GENERAL REQUIREMENTS Total | | | | \$0.00 | | \$0.00 | | \$4,800.00 | | \$0.00 | \$0.00 | \$4,800.00 |
| 02020 - Underground marking tape | | | | | | | | | | | | | |
| | Underground tape, detectable aluminum, 2" | 16 | Clf | \$2.34 | \$37.44 | \$3.06 | \$48.96 | \$0.00 | \$0.00 | \$5.4 / Clf | \$0.00 | \$0.00 | \$86.40 |
| 02060 - Site demolition | | | | | | | | | | | | | |
| | Site dml, no hauling, pavement removal, bit, 4" to 6" thick | 1072 | Sqyd | \$5.29 | \$5,670.88 | \$0.00 | \$0.00 | \$3.49 | \$3,741.28 | \$8.78 / Sqyd | \$0.00 | \$0.00 | \$9,412.16 |
| | Asphalt disposal - hauling and disposal fee, 4" thick | 1072 | Sqyd | \$1.00 | \$1,072.00 | \$4.70 | \$5,038.40 | \$1.32 | \$1,415.04 | \$7.02 / Sqyd | \$0.00 | \$0.00 | \$7,525.44 |
| 02170 - Saw cutting | | | | | | | | | | | | | |
| | Saw cutting, asphalt, up to 3" deep | 3214 | Lnft | \$0.48 | \$1,542.72 | \$0.07 | \$224.98 | \$0.26 | \$835.64 | \$0.81 / Lnft | \$0.00 | \$0.00 | \$2,603.34 |
| | Saw cutting, asphalt, after 3" deep; each addl inch of depth | 3214 | Lnft | \$0.82 | \$2,635.48 | \$0.30 | \$964.20 | \$0.44 | \$1,414.16 | \$1.56 / Lnft | \$0.00 | \$0.00 | \$5,013.84 |
| 02310 - Fine grade | | | | | | | | | | | | | |
| | Fine grade under asphalt | 1072 | Sqyd | \$0.26 | \$278.72 | \$0.00 | \$0.00 | \$0.21 | \$225.12 | \$0.47 / Sqyd | \$0.00 | \$0.00 | \$503.84 |
| 02340 - Bedding | | | | | | | | | | | | | |
| | Bedding, crushed stone 3/4" to 1/2" | 1577 | Cuyd | \$8.47 | \$13,357.19 | \$32.03 | \$50,511.31 | \$1.89 | \$2,980.53 | \$42.39 / Cuyd | \$0.00 | \$0.00 | \$66,849.03 |
| | Backfill, dozer backfilling, trench, no compaction | 2373 | Cuyd | \$0.80 | \$1,898.51 | \$0.00 | \$0.00 | \$1.28 | \$3,037.62 | \$2.08 / Cuyd | \$0.00 | \$0.00 | \$4,936.13 |
| 02360 - Compaction | | | | | | | | | | | | | |
| | Backfill Compaction, walk behind, vibrating roller 24" W, 6" lifts, 2 | 2373 | Cuyd | \$1.72 | \$4,081.80 | \$0.00 | \$0.00 | \$0.41 | \$972.99 | \$2.13 / Cuyd | \$0.00 | \$0.00 | \$5,054.79 |
| | Subgrade Compaction, rammer tamper, 6" to 11", 4" lifts, 2 passes | 193 | Cuyd | \$2.93 | \$564.32 | \$0.00 | \$0.00 | \$0.78 | \$150.23 | \$3.71 / Cuyd | \$0.00 | \$0.00 | \$714.55 |
| | Bedding Compaction, rammer tamper, 6" to 11", 4" lifts, 2 passes | 1356 | Cuyd | \$2.93 | \$3,973.08 | \$0.00 | \$0.00 | \$0.78 | \$1,057.68 | \$3.71 / Cuyd | \$0.00 | \$0.00 | \$5,030.76 |
| 02450 - Excavating, trench | | | | | | | | | | | | | |
| | Excavate trench, common earth curb, 6'-10' deep, 1-1/2 CY hyd | 3082 | Cuyd | \$1.76 | \$5,424.32 | \$0.00 | \$0.00 | \$1.28 | \$3,944.96 | \$3.04 / Cuyd | \$0.00 | \$0.00 | \$9,369.28 |
| 02460 - Hauling | | | | | | | | | | | | | |
| | Hauling, LCY, no loading, 12 c.y. dump truck, 20 MI RT, 0.4 lds/hr | 1017 | Cuyd | \$7.18 | \$7,302.49 | \$3.00 | \$3,051.18 | \$15.45 | \$15,709.80 | \$25.63 / Cuyd | \$0.00 | \$0.00 | \$26,063.47 |
| | Loading Trucks, F.E. Loader, 3 C.Y.. | 1017 | Cuyd | \$0.74 | \$752.62 | \$0.00 | \$0.00 | \$1.24 | \$1,261.15 | \$1.98 / Cuyd | \$0.00 | \$0.00 | \$2,013.78 |
| | Disposal fee | 51 | Trk | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$105 / Trk | \$0.00 | \$5,339.57 | \$5,339.57 |
| 02490 - Erosion control | | | | | | | | | | | | | |
| | Erosion control allowance: | 1 | Lsum | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$2614 / Lsum | \$0.00 | \$2,614.00 | \$2,614.00 |
| 02570 - Catch basins or manholes | | | | | | | | | | | | | |
| | Catch basins or manholes, concrete, precast, 5' I.D., 8' deep | 9 | Each | \$846.67 | \$7,620.03 | \$1,475.00 | \$13,275.00 | \$189.01 | \$1,701.09 | \$2510.68 / Each | \$0.00 | \$0.00 | \$22,596.12 |
| | Cleanout | 5 | Each | \$1,019.00 | \$5,095.00 | \$1,560.00 | \$7,800.00 | \$249.00 | \$1,245.00 | \$2828 / Each | \$0.00 | \$0.00 | \$14,140.00 |
| | CB or manholes, conc, slab tops, precast, 8" thick, 5' dia | 9 | Each | \$169.33 | \$1,523.97 | \$395.00 | \$3,555.00 | \$37.80 | \$340.20 | \$602.13 / Each | \$0.00 | \$0.00 | \$5,419.17 |
| | Catch bsns or manholes, frs and covs, hvy traffic, 24" diam, 400 lb. | 9 | Each | \$162.82 | \$1,465.38 | \$260.00 | \$2,340.00 | \$36.35 | \$327.15 | \$459.17 / Each | \$0.00 | \$0.00 | \$4,132.53 |
| | CB or manholes, inverts, single channel brick, concrete | 9 | Each | \$144.00 | \$1,296.00 | \$100.00 | \$900.00 | \$0.00 | \$0.00 | \$244 / Each | \$0.00 | \$0.00 | \$2,196.00 |
| | CB/manholes, steps, heavyweight cast iron, 12" x 10-1/2", for all con | 45 | Each | \$9.66 | \$434.70 | \$23.00 | \$1,035.00 | \$0.00 | \$0.00 | \$32.66 / Each | \$0.00 | \$0.00 | \$1,469.70 |
| 02580 - Headwall | | | | | | | | | | | | | |
| | Headwall, conc, CIP, 30< skewed wingwall, | 2 | Each | \$5,480.00 | \$10,960.00 | \$2,173.00 | \$4,346.00 | \$138.00 | \$276.00 | \$7791 / Each | \$0.00 | \$0.00 | \$15,582.00 |

| Item | Item Description | Quantity | Unit | Labor \$/Unit | Labor Amount | Materials \$/Unit | Materials Amount | Equip \$/Unit | Equip Amount | Total \$/Unit | Subs Amount | Other Amount | Grand Total |
|--|--|----------|------|---------------|---------------------|-------------------|---------------------|---------------|--------------------|-----------------|-------------------|-------------------|---------------------|
| <i>02610 - Asphalt concrete pavement</i> | | | | | | | | | | | | | |
| | Asphaltic conc pavement, pavement replacement over trench, 4" | 1072 | Sqyd | \$35.00 | \$37,520.00 | \$18.00 | \$19,296.00 | \$2.98 | \$3,194.56 | \$55.98 / Sqyd | \$0.00 | \$0.00 | \$60,010.56 |
| <i>02640 - Lines on pav't</i> | | | | | | | | | | | | | |
| | Lines on pvmt, acrylic waterborne, white or yellow, 4" wide | 1600 | Lnft | \$0.12 | \$192.00 | \$0.17 | \$272.00 | \$0.08 | \$128.00 | \$0.37 / Lnft | \$0.00 | \$0.00 | \$592.00 |
| <i>02840 - Landscaping</i> | | | | | | | | | | | | | |
| | Landscaping Allowance | 1 | Lsum | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$5000 / Lsum | \$5,000.00 | \$0.00 | \$5,000.00 |
| <i>02900 - Pot Holing</i> | | | | | | | | | | | | | |
| | Pot Holing - pipe lines: 2 per 100' | 32 | Each | \$250.00 | \$8,000.00 | \$0.00 | \$0.00 | \$35.00 | \$1,120.00 | \$285 / Each | \$0.00 | \$0.00 | \$9,120.00 |
| | <i>SITE CONSTRUCTION Total</i> | | | | <i>\$122,698.66</i> | | <i>\$112,658.03</i> | | <i>\$45,078.20</i> | | <i>\$5,000.00</i> | <i>\$7,953.57</i> | <i>\$293,388.45</i> |
| <i>03 - CONCRETE</i> | | | | | | | | | | | | | |
| <i>03330 - Patching concrete</i> | | | | | | | | | | | | | |
| | Pre-cast concrete wall penetration, non-shrink grout, 42" hole | 18 | Each | \$100.00 | \$1,800.00 | \$240.00 | \$4,320.00 | \$0.00 | \$0.00 | \$340 / Each | \$0.00 | \$0.00 | \$6,120.00 |
| | <i>CONCRETE Total</i> | | | | <i>\$1,800.00</i> | | <i>\$4,320.00</i> | | <i>\$0.00</i> | | <i>\$0.00</i> | <i>\$0.00</i> | <i>\$6,120.00</i> |
| <i>15 - MECHANICAL</i> | | | | | | | | | | | | | |
| | Piping, drainage & sewage, RCP, class 3, no gaskets, 42" dia | 1600 | Lnft | \$39.70 | \$63,520.00 | \$95.00 | \$152,000.00 | \$3.94 | \$6,304.00 | \$138.64 / Lnft | \$0.00 | \$0.00 | \$221,824.00 |
| | Piping, water dist, conc pipe, gasket, 42" dia | 160 | Each | \$3.14 | \$502.40 | \$9.50 | \$1,520.00 | \$0.00 | \$0.00 | \$12.64 / Each | \$0.00 | \$0.00 | \$2,022.40 |
| | <i>MECHANICAL Total</i> | | | | <i>\$64,022.40</i> | | <i>\$153,520.00</i> | | <i>\$6,304.00</i> | | <i>\$0.00</i> | <i>\$0.00</i> | <i>\$223,846.40</i> |
| | <i>Project BFA Total</i> | | | | <i>\$188,521.06</i> | | <i>\$270,498.03</i> | | <i>\$56,182.20</i> | | <i>\$5,000.00</i> | <i>\$7,953.57</i> | <i>\$528,154.85</i> |
| Grand Total | | | | | \$188,521.06 | | \$270,498.03 | | \$56,182.20 | | \$5,000.00 | \$7,953.57 | \$528,154.85 |

| Category | Percent | Amount |
|-------------------------------------|---------|------------------|
| Labor | 35.69% | \$188,521 |
| Material | 51.22% | \$270,498 |
| Equipment | 10.64% | \$56,182 |
| Subcontractor | 0.95% | \$5,000 |
| Other | 1.51% | \$7,954 |
| Net Costs | | \$528,155 |
| Labor Mark-up | 18.00% | \$33,934 |
| Material Mark-up | 15.00% | \$40,575 |
| Subcontractor Mark-up | 5.00% | \$250 |
| Equipment Mark-up | 15.00% | \$8,427 |
| Sales tax (material) | 7.75% | \$20,964 |
| Sales tax (equipment) | 7.75% | \$4,354 |
| Material Shipping & Handling | 2.50% | \$6,762 |
| Worker's Travel/Subsistence | 0.10% | \$189 |
| Subtotal | | \$643,609 |
| Contractor General Conditions | 12.00% | \$77,233 |
| Subtotal | | \$720,842 |
| Earthquake Insurance | 0.10% | \$721 |
| Subtotal | | \$721,563 |
| Construction Contingency | 20.00% | \$144,313 |
| Subtotal | | \$865,876 |
| Bldg Risk, Liability Auto Ins. | 2.00% | \$17,318 |
| Subtotal | | \$883,194 |
| Performance Bond | 1.00% | \$8,832 |
| Payment Bond | 1.00% | \$8,832 |
| Subtotal | | \$900,857 |
| Engineering Fee | 10.00% | \$52,815 |
| Environmental Permitting (Lump Sum) | - | \$10,000 |
| Total Estimate | | \$963,673 |



City of Carlsbad, Master Drainage Plan

| | |
|--------------------------------|------------------|
| Project Number:: | 128290 |
| Client:: | City of Carlsbad |
| Estimator(s):: | SB / DG |
| Estimating Office:: | Walnut Creek |
| Estimate Issue Number:: | 01 |
| Estimate Original Issue Date:: | 5/12/2006 |
| Estimate Revision Number:: | 04 |
| Estimate Revision Date:: | 6/27/2008 |
| BC Project Manager:: | Chris Herencia |
| Estimate QA/QC Reviewer:: | Bob Ferguson |
| Estimate QA/QC Date:: | 6/27/2008 |

PROJECT LOCATION / PROCESS AREA

Project BFB-U - Located in Basin B

| Item | Item Description | Quantity | Unit | Labor \$/Unit | Labor Amount | Materials \$/Unit | Materials Amount | Equip \$/Unit | Equip Amount | Total \$/Unit | Subs Amount | Other Amount | Grand Total |
|--|---|----------|------|---------------|--------------------|-------------------|--------------------|---------------|--------------------|-----------------|---------------|---------------|--------------------|
| Project BFB-U | | | | | | | | | | | | | |
| 02 - SITE CONSTRUCTION | | | | | | | | | | | | | |
| <i>02060 - Site demolition</i> | | | | | | | | | | | | | |
| | Site demo, Area vegetation removal | 1 | Acre | \$1,758.00 | \$2,004.12 | \$0.00 | \$0.00 | \$3,692.00 | \$4,208.88 | \$5450 / Acre | \$0.00 | \$0.00 | \$6,213.00 |
| <i>02330 - Backfill, structural</i> | | | | | | | | | | | | | |
| | Backfill, side slope fill | 515 | Cuyd | \$0.60 | \$309.00 | \$0.00 | \$0.00 | \$1.20 | \$619.00 | \$1.8 / Cuyd | \$0.00 | \$0.00 | \$928.00 |
| <i>02360 - Compaction</i> | | | | | | | | | | | | | |
| | Compaction, riding, vibrating roller, 6" lifts, side slope fill | 515 | Cuyd | \$2.93 | \$1,508.95 | \$0.00 | \$0.00 | \$0.78 | \$401.70 | \$3.71 / Cuyd | \$0.00 | \$0.00 | \$1,910.65 |
| <i>02390 - Excavating, bulk bank measure</i> | | | | | | | | | | | | | |
| | Excavating, bulk bank measure, FE loader, whl mtd, 1.5 CY cap = 80 | 1864 | Cuyd | \$1.95 | \$3,634.80 | \$0.00 | \$0.00 | \$1.42 | \$2,646.88 | \$3.37 / Cuyd | \$0.00 | \$0.00 | \$6,281.68 |
| <i>02430 - Fill</i> | | | | | | | | | | | | | |
| | Fill, spread fill, with dozer | 515 | Cuyd | \$0.72 | \$370.80 | \$0.00 | \$0.00 | \$1.15 | \$592.25 | \$1.87 / Cuyd | \$0.00 | \$0.00 | \$963.05 |
| <i>02460 - Hauling</i> | | | | | | | | | | | | | |
| | Hauling, LCY, no loading, 20 c.y. dump truck, 30 MI RT, 0.33 lds/hr | 1348 | Cuyd | \$5.95 | \$8,020.60 | \$0.00 | \$0.00 | \$10.40 | \$14,019.20 | \$16.35 / Cuyd | \$0.00 | \$0.00 | \$22,039.80 |
| | Loading Trucks, F.E. Loader, 3 C.Y.. | 1348 | Cuyd | \$0.74 | \$997.52 | \$0.00 | \$0.00 | \$1.24 | \$1,671.52 | \$1.98 / Cuyd | \$0.00 | \$0.00 | \$2,669.04 |
| <i>02480 - Rip-rap</i> | | | | | | | | | | | | | |
| | Rip-rap, gabions, galv steel mesh boxes, stone filled | 100 | Cuyd | \$49.95 | \$4,995.00 | \$60.56 | \$6,056.00 | \$16.44 | \$1,644.00 | \$126.95 / Cuyd | \$0.00 | \$0.00 | \$12,695.00 |
| <i>02490 - Erosion control</i> | | | | | | | | | | | | | |
| | Erosion control, polypropylene mesh, stapled, 6.5 oz./s.y | 3299 | Sqyd | \$0.47 | \$1,550.53 | \$1.40 | \$4,618.60 | \$0.00 | \$0.00 | \$1.87 / Sqyd | \$0.00 | \$0.00 | \$6,169.13 |
| <i>02600 - Base course</i> | | | | | | | | | | | | | |
| | Base course, roadway, compacted to 12" deep | 667 | Sqyd | \$0.87 | \$580.29 | \$10.76 | \$7,176.92 | \$1.11 | \$740.37 | \$12.74 / Sqyd | \$0.00 | \$0.00 | \$8,497.58 |
| | SITE CONSTRUCTION Total | | | | \$23,971.61 | | \$17,851.52 | | \$26,543.80 | | \$0.00 | \$0.00 | \$68,366.93 |
| 03 - CONCRETE | | | | | | | | | | | | | |
| | Project BFB-U-Total | | | | \$23,971.61 | | \$17,851.52 | | \$26,543.80 | | \$0.00 | \$0.00 | \$68,366.93 |
| | Grand Total | | | | \$23,971.61 | | \$17,851.52 | | \$26,543.80 | | \$0.00 | \$0.00 | \$68,366.93 |

| Category | Percent | Amount |
|-------------------------------------|---------|------------------|
| Labor | 35.06% | \$23,972 |
| Material | 26.11% | \$17,852 |
| Equipment | 38.83% | \$26,544 |
| Subcontractor | 0.00% | \$0 |
| Other | 0.00% | \$0 |
| Net Costs | | \$68,367 |
| Labor Mark-up | 18.00% | \$4,315 |
| Material Mark-up | 15.00% | \$2,678 |
| Subcontractor Mark-up | 5.00% | \$0 |
| Equipment Mark-up | 15.00% | \$3,982 |
| Sales tax (material) | 7.75% | \$1,383 |
| Sales tax (equipment) | 7.75% | \$2,057 |
| Material Shipping & Handling | 2.50% | \$446 |
| Worker's Travel/Subsistence | 0.10% | \$24 |
| Subtotal | | \$83,252 |
| Contractor General Conditions | 12.00% | \$9,990 |
| Subtotal | | \$93,242 |
| Earthquake Insurance | 0.10% | \$93 |
| Subtotal | | \$93,335 |
| Construction Contingency | 25.00% | \$23,334 |
| Subtotal | | \$116,669 |
| Bldg Risk, Liability Auto Ins. | 2.00% | \$2,333 |
| Subtotal | | \$119,003 |
| Performance Bond | 1.00% | \$1,190 |
| Payment Bond | 1.00% | \$1,190 |
| Subtotal | | \$121,383 |
| Engineering Fee | 10.00% | \$6,837 |
| Environmental Permitting (Lump Sum) | - | \$10,000 |
| Total Estimate | | \$138,220 |



City of Carlsbad, Drainage Master Plan

| | |
|--------------------------------|------------------|
| Project Number:: | 128290 |
| Client:: | City of Carlsbad |
| Estimator(s):: | SB / DG |
| Estimating Office:: | Walnut Creek |
| Estimate Issue Number:: | 01 |
| Estimate Original Issue Date:: | 5/12/2006 |
| Estimate Revision Number:: | 04 |
| Estimate Revision Date:: | 6/27/2008 |
| BC Project Manager:: | Chris Herencia |
| Estimate QA/QC Reviewer:: | Bob Ferguson |
| Estimate QA/QC Date:: | 6/27/2008 |

PROJECT LOCATION / PROCESS AREA

Project BFB-L - Located in Basin B

51 of 122

| Item | Item Description | Quantity | Unit | Labor \$/Unit | Labor Amount | Materials \$/Unit | Materials Amount | Equip \$/Unit | Equip Amount | Total \$/Unit | Subs Amount | Other Amount | Grand Total |
|------------------------------------|--|----------|------|---------------|--------------|-------------------|------------------|---------------|--------------|-----------------|-------------|--------------|--------------|
| 15 - MECHANICAL | | | | | | | | | | | | | |
| 15090 - Pipe, drng&sewage, concret | | | | | | | | | | | | | |
| | Piping, drainage & sewage, RCP, class 3, no gaskets, 48" dia | 800 | Lnft | \$44.66 | \$35,728.00 | \$120.00 | \$96,000.00 | \$4.43 | \$3,544.00 | \$169.09 / Lnft | \$0.00 | \$0.00 | \$135,272.00 |
| | Piping, water dist, conc pipe, gasket, 48" dia | 80 | Each | \$3.14 | \$251.20 | \$10.00 | \$800.00 | \$0.00 | \$0.00 | \$13.14 / Each | \$0.00 | \$0.00 | \$1,051.20 |
| | | | | | | | | | | | | | |
| | MECHANICAL Total | | | | \$79,062.52 | | \$140,621.30 | | \$30,118.84 | | \$0.00 | \$2,614.00 | \$252,416.66 |
| | Project BFB-L Total | | | | \$79,062.52 | | \$140,621.30 | | \$32,998.84 | | \$0.00 | \$2,614.00 | \$255,296.66 |
| | | | | | | | | | | | | | |
| | Grand Total | | | | \$79,062.52 | | \$140,621.30 | | \$32,998.84 | | \$0.00 | \$2,614.00 | \$255,296.66 |

| Category | Percent | Amount |
|-------------------------------------|---------|------------------|
| Labor | 30.97% | \$79,063 |
| Material | 55.08% | \$140,621 |
| Equipment | 12.93% | \$32,999 |
| Subcontractor | 0.00% | \$0 |
| Other | 1.02% | \$2,614 |
| Net Costs | | \$255,297 |
| Labor Mark-up | 18.00% | \$14,231 |
| Material Mark-up | 15.00% | \$21,093 |
| Subcontractor Mark-up | 5.00% | \$0 |
| Equipment Mark-up | 15.00% | \$4,950 |
| Sales tax (material) | 7.75% | \$10,898 |
| Sales tax (equipment) | 7.75% | \$2,557 |
| Material Shipping & Handling | 2.50% | \$3,516 |
| Worker's Travel/Subsistence | 0.10% | \$79 |
| Subtotal | | \$312,621 |
| Contractor General Conditions | 12.00% | \$37,515 |
| Subtotal | | \$350,136 |
| Earthquake Insurance | 0.10% | \$350 |
| Subtotal | | \$350,486 |
| Construction Contingency | 25.00% | \$87,621 |
| Subtotal | | \$438,107 |
| Bldg Risk, Liability Auto Ins. | 2.00% | \$8,762 |
| Subtotal | | \$446,869 |
| Performance Bond | 1.00% | \$4,469 |
| Payment Bond | 1.00% | \$4,469 |
| Subtotal | | \$455,807 |
| Engineering Fee | 10.00% | \$25,530 |
| Environmental Permitting (Lump Sum) | - | \$10,000 |
| Total Estimate | | \$491,336 |



City of Carlsbad, Drainage Master Plan

| | |
|--------------------------------|------------------|
| Project Number:: | 128290 |
| Client:: | City of Carlsbad |
| Estimator(s):: | JW / DG |
| Estimating Office:: | Walnut Creek |
| Estimate Issue Number:: | 01 |
| Estimate Original Issue Date:: | 3/14/2006 |
| Estimate Revision Number:: | 04 |
| Estimate Revision Date:: | 6/27/2008 |
| BC Project Manager:: | Chris Herencia |
| Estimate QA/QC Reviewer:: | Butch Matthews |
| Estimate QA/QC Date:: | 6/27/2008 |

PROJECT LOCATION / PROCESS AREA

Project BF1 - Located in Basin B

| Item | Item Description | Quantity | Unit | Labor \$/Unit | Labor Amount | Materials \$/Unit | Materials Amount | Equip \$/Unit | Equip Amount | Total \$/Unit | Subs Amount | Other Amount | Grand Total |
|---|--|----------|------|---------------|--------------------|-------------------|-------------------|---------------|---------------------|-----------------|---------------|-------------------|---------------------|
| Project BF1 | | | | | | | | | | | | | |
| 02 - SITE CONSTRUCTION | | | | | | | | | | | | | |
| 02320 - Backfill | | | | | | | | | | | | | |
| | Backfill, dozer backfilling, trench, no compaction, inlet | 11 | Cuyd | \$0.80 | \$9.12 | \$0.00 | \$0.00 | \$1.28 | \$14.59 | \$2.08 / Cuyd | \$0.00 | \$0.00 | \$23.71 |
| | Backfill, dozer backfilling, trench, no compaction, outlet | 10 | Cuyd | \$0.80 | \$8.32 | \$0.00 | \$0.00 | \$1.28 | \$13.31 | \$2.08 / Cuyd | \$0.00 | \$0.00 | \$21.63 |
| 02340 - Bedding | | | | | | | | | | | | | |
| | Bedding, crushed stone 3/4" to 1/2", inlet | 9 | Cuyd | \$8.47 | \$75.38 | \$32.03 | \$285.07 | \$1.89 | \$16.82 | \$42.39 / Cuyd | \$0.00 | \$0.00 | \$377.27 |
| | Bedding, crushed stone 3/4" to 1/2", outlet | 7 | Cuyd | \$8.47 | \$58.44 | \$32.03 | \$221.01 | \$1.89 | \$13.04 | \$42.39 / Cuyd | \$0.00 | \$0.00 | \$292.49 |
| 02360 - Compaction | | | | | | | | | | | | | |
| | Compaction, trench, walk behind, vib. plate, bedding, inlet | 8 | Cuyd | \$1.90 | \$14.63 | \$0.00 | \$0.00 | \$0.51 | \$3.93 | \$2.41 / Cuyd | \$0.00 | \$0.00 | \$18.56 |
| | Compaction, trench, walk behind, vib. plate, subgrade, inlet | 1 | Cuyd | \$1.90 | \$1.90 | \$0.00 | \$0.00 | \$0.51 | \$0.51 | \$2.41 / Cuyd | \$0.00 | \$0.00 | \$2.41 |
| | Compaction, trench, walk behind, vib. plate, bedding, outlet | 6 | Cuyd | \$1.90 | \$11.21 | \$0.00 | \$0.00 | \$0.51 | \$3.01 | \$2.41 / Cuyd | \$0.00 | \$0.00 | \$14.22 |
| | Compaction, trench, walk behind, vib. plate, subgrade, outlet | 1 | Cuyd | \$1.90 | \$1.71 | \$0.00 | \$0.00 | \$0.51 | \$0.46 | \$2.41 / Cuyd | \$0.00 | \$0.00 | \$2.17 |
| | Compaction, trench, walk behind, vib. plate, inlet | 10 | Cuyd | \$1.90 | \$19.38 | \$0.00 | \$0.00 | \$0.51 | \$5.20 | \$2.41 / Cuyd | \$0.00 | \$0.00 | \$24.58 |
| | Compaction, trench, walk behind, vib. plate, outlet | 9 | Cuyd | \$1.90 | \$17.67 | \$0.00 | \$0.00 | \$0.51 | \$4.74 | \$2.41 / Cuyd | \$0.00 | \$0.00 | \$22.41 |
| 02410 - Excavation, bulk, scrapers | | | | | | | | | | | | | |
| | Excavation, self prop scraper, 14 CY 1/4 push dozer, com earth | 31500 | Cuyd | \$1.29 | \$40,635.00 | \$0.00 | \$0.00 | \$5.19 | \$163,485.00 | \$6.48 / Cuyd | \$0.00 | \$0.00 | \$204,120.00 |
| 02450 - Excavating, trench | | | | | | | | | | | | | |
| | Excavate trench, no sht or dewtrg, 4'-6' D, 1-1/2 CY hyd bac, inlet | 22 | Cuyd | \$1.95 | \$42.12 | \$0.00 | \$0.00 | \$1.42 | \$30.67 | \$3.37 / Cuyd | \$0.00 | \$0.00 | \$72.79 |
| | Excavate trench, no sht or dewtrg, 4'-6' D, 1-1/2 CY hyd bac, outlet | 17 | Cuyd | \$1.95 | \$33.74 | \$0.00 | \$0.00 | \$1.42 | \$24.57 | \$3.37 / Cuyd | \$0.00 | \$0.00 | \$58.30 |
| 02480 - Rip-rap | | | | | | | | | | | | | |
| | Rip-rap, gabions, galv steel mesh boxes, stone filled | 94 | Cuyd | \$49.95 | \$4,675.32 | \$60.56 | \$5,668.42 | \$16.44 | \$1,538.78 | \$126.95 / Cuyd | \$0.00 | \$0.00 | \$11,882.52 |
| | SITE CONSTRUCTION Total | | | | \$45,603.94 | | \$6,174.49 | | \$165,154.64 | | \$0.00 | \$0.00 | \$216,933.07 |
| 03 - CONCRETE | | | | | | | | | | | | | |
| 03150 - Concrete, ready mix | | | | | | | | | | | | | |
| | Headwall, inlet | 2 | Cuyd | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$1000 / Cuyd | \$0.00 | \$2,480.00 | \$2,480.00 |
| | Headwall, outlet | 1 | Cuyd | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$1000 / Cuyd | \$0.00 | \$1,330.00 | \$1,330.00 |
| | CONCRETE Total | | | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | \$3,810.00 | \$3,810.00 |
| 15 - MECHANICAL | | | | | | | | | | | | | |
| 15090 - Pipe, drng&sewage, concret | | | | | | | | | | | | | |
| | Piping, drainage & sewage, RCP, class 3, no gaskets, 36" dia | 8 | Lnft | \$39.70 | \$317.60 | \$73.00 | \$584.00 | \$3.94 | \$31.52 | \$116.64 / Lnft | \$0.00 | \$0.00 | \$933.12 |
| | Piping, drainage & sewage, RCP, class 3, no gaskets, 48" dia | 8 | Lnft | \$44.66 | \$357.28 | \$120.00 | \$960.00 | \$4.43 | \$35.44 | \$169.09 / Lnft | \$0.00 | \$0.00 | \$1,352.72 |
| 15125 - Pipe, strm drng, corr metal | | | | | | | | | | | | | |
| | Piping, storm drain, CMP, plain, 20' lengths, 24" dia, 14 ga | 24 | Lnft | \$14.00 | \$336.00 | \$17.62 | \$422.88 | \$1.62 | \$38.88 | \$33.24 / Lnft | \$0.00 | \$0.00 | \$797.76 |
| | MECHANICAL Total | | | | \$1,010.88 | | \$1,966.88 | | \$105.84 | | \$0.00 | \$0.00 | \$3,083.60 |
| | Project BF1 Total | | | | \$46,614.82 | | \$8,141.37 | | \$165,260.48 | | \$0.00 | \$3,810.00 | \$223,826.67 |
| | Grand Total | | | | \$46,614.82 | | \$8,141.37 | | \$165,260.48 | | \$0.00 | \$3,810.00 | \$223,826.67 |

| Category | Percent | Amount |
|-------------------------------------|---------|------------------|
| Labor | 20.83% | \$46,615 |
| Material | 3.64% | \$8,141 |
| Equipment | 73.83% | \$165,260 |
| Subcontractor | 0.00% | \$0 |
| Other | 1.70% | \$3,810 |
| Net Costs | | \$223,827 |
| Labor Mark-up | 18.00% | \$8,391 |
| Material Mark-up | 15.00% | \$1,221 |
| Subcontractor Mark-up | 5.00% | \$0 |
| Equipment Mark-up | 15.00% | \$24,789 |
| Sales tax (material) | 7.75% | \$631 |
| Sales tax (equipment) | 7.75% | \$12,808 |
| Material Shipping & Handling | 2.50% | \$204 |
| Worker's Travel/Subsistence | 0.10% | \$47 |
| Subtotal | | \$271,916 |
| Contractor General Conditions | 12.00% | \$32,630 |
| Subtotal | | \$304,546 |
| Earthquake Insurance | 0.10% | \$305 |
| Subtotal | | \$304,851 |
| Construction Contingency | 20.00% | \$60,970 |
| Subtotal | | \$365,821 |
| Bldg Risk, Liability Auto Ins. | 2.00% | \$7,316 |
| Subtotal | | \$373,138 |
| Performance Bond | 1.00% | \$3,731 |
| Payment Bond | 1.00% | \$3,731 |
| Subtotal | | \$380,600 |
| Engineering Fee | 10.00% | \$22,383 |
| Environmental Permitting (Lump Sum) | - | \$10,000 |
| Total Estimate | | \$412,983 |



City of Carlsbad, Drainage Master Plan

| | |
|--------------------------------|------------------|
| Project Number:: | 128290 |
| Client:: | City of Carlsbad |
| Estimator(s):: | SB / DG |
| Estimating Office:: | Walnut Creek |
| Estimate Issue Number:: | 01 |
| Estimate Original Issue Date:: | 5/12/2006 |
| Estimate Revision Number:: | 04 |
| Estimate Revision Date:: | 6/27/2008 |
| BC Project Manager:: | Chris Herencia |
| Estimate QA/QC Reviewer:: | Bob Ferguson |
| Estimate QA/QC Date:: | 6/27/2008 |

PROJECT LOCATION / PROCESS AREA

Project BJ-1 - Located in Basin B

| Item | Item Description | Quantity | Unit | Labor \$/Unit | Labor Amount | Materials \$/Unit | Materials Amount | Equip \$/Unit | Equip Amount | Total \$/Unit | Subs Amount | Other Amount | Grand Total |
|---|--|----------|------|---------------|--------------------|-------------------|--------------------|---------------|---------------------|----------------|--------------------|--------------------|---------------------|
| Project BJ-1 | | | | | | | | | | | | | |
| 02 - SITE CONSTRUCTION | | | | | | | | | | | | | |
| 02210 - Clear and grub | | | | | | | | | | | | | |
| | Clear & grub, brush, including stumps | 6 | Acre | \$1,759.00 | \$10,554.00 | \$0.00 | \$0.00 | \$3,686.00 | \$22,116.00 | \$5445 / Acre | \$0.00 | \$0.00 | \$32,670.00 |
| 02310 - Fine grade | | | | | | | | | | | | | |
| | Grade pad, contour area | 23334 | Sqyd | \$0.55 | \$12,833.70 | \$0.00 | \$0.00 | \$0.44 | \$10,266.96 | \$0.99 / Sqyd | \$0.00 | \$0.00 | \$23,100.66 |
| | Grade slopes | 6556 | Sqyd | \$0.55 | \$3,605.80 | \$0.00 | \$0.00 | \$0.44 | \$2,884.64 | \$0.99 / Sqyd | \$0.00 | \$0.00 | \$6,490.44 |
| 02320 - Backfill | | | | | | | | | | | | | |
| | Backfill, dozer backfilling, trench, no compaction | 7300 | Cuyd | \$0.80 | \$5,840.00 | \$0.00 | \$0.00 | \$1.28 | \$9,344.00 | \$2.08 / Cuyd | \$0.00 | \$0.00 | \$15,184.00 |
| 02360 - Compaction | | | | | | | | | | | | | |
| | Compaction, trench, walk behind, vib... Plate | 7300 | Cuyd | \$1.90 | \$13,870.00 | \$0.00 | \$0.00 | \$0.51 | \$3,723.00 | \$2.41 / Cuyd | \$0.00 | \$0.00 | \$17,593.00 |
| 02400 - Excavating bulk, dozer, | | | | | | | | | | | | | |
| | Hauling, LCY, no loading, 50" haul | 31450 | Cuyd | \$0.58 | \$18,241.00 | \$0.00 | \$0.00 | \$0.95 | \$29,877.50 | \$1.53 / Cuyd | \$0.00 | \$0.00 | \$48,118.50 |
| 02410 - Excavation, bulk, scrapers | | | | | | | | | | | | | |
| | Excavation, self prop scraper, 14 CY 1/4 push dozer, com earth | 7300 | Cuyd | \$1.29 | \$9,417.00 | \$0.00 | \$0.00 | \$5.19 | \$37,887.00 | \$6.48 / Cuyd | \$0.00 | \$0.00 | \$47,304.00 |
| 02480 - Rip-rap | | | | | | | | | | | | | |
| | Rip-rap, energy dissipater | 120 | Sqyd | \$55.00 | \$6,600.00 | \$25.00 | \$3,000.00 | \$18.70 | \$2,244.00 | \$98.7 / Sqyd | \$0.00 | \$0.00 | \$11,844.00 |
| 02490 - Erosion Control | | | | | | | | | | | | | |
| | Erosion control, jute mesh, 100 SY per roll, 4' wide | 6556 | Sqyd | \$0.48 | \$3,146.88 | \$0.75 | \$4,917.00 | \$0.12 | \$786.72 | \$1.35 / Sqyd | \$0.00 | \$0.00 | \$8,850.60 |
| | Erosion control, silt fence, polypropylene, 3' high | 1800 | Inft | \$0.80 | \$1,440.00 | \$0.34 | \$612.00 | \$0.00 | \$0.00 | \$1.14 / Inft | \$0.00 | \$0.00 | \$2,052.00 |
| | Erosion control, silt fence, polypropylene, 3' high, remove | 1800 | Inft | \$0.80 | \$1,440.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.8 / Inft | \$0.00 | \$0.00 | \$1,440.00 |
| | Erosion control, hay bales, staked | 2200 | Inft | \$1.19 | \$2,618.00 | \$2.25 | \$4,950.00 | \$0.10 | \$220.00 | \$3.54 / Inft | \$0.00 | \$0.00 | \$7,788.00 |
| 02840 - Landscaping | | | | | | | | | | | | | |
| | Slope Landscaping/irrigation | 59000 | Sqft | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$29500 / Sqft | \$29,500.00 | \$0.00 | \$29,500.00 |
| SITE CONSTRUCTION Total | | | | | \$89,606.38 | | \$13,479.00 | | \$119,349.82 | | \$29,500.00 | \$0.00 | \$251,935.20 |
| 03 - CONCRETE | | | | | | | | | | | | | |
| 03150 - Concrete, ready mix | | | | | | | | | | | | | |
| | Headwall | 3 | Cuyd | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$1000 / Cuyd | \$0.00 | \$3,000.00 | \$3,000.00 |
| | Headwall | 3 | Cuyd | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$1000 / Cuyd | \$0.00 | \$3,000.00 | \$3,000.00 |
| | 3'x6' RCB Culvert | 16 | Cuyd | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$1000 / Cuyd | \$0.00 | \$16,000.00 | \$16,000.00 |
| CONCRETE Total | | | | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | \$22,000.00 | \$22,000.00 |
| 11 - EQUIPMENT | | | | | | | | | | | | | |
| 11010 - Process Equipment | | | | | | | | | | | | | |
| | Water unit | 1628 | Gal | \$0.70 | \$1,139.60 | \$1.05 | \$1,709.40 | \$0.00 | \$0.00 | \$1.75 / Gal | \$0.00 | \$0.00 | \$2,849.00 |
| EQUIPMENT Total | | | | | \$1,139.60 | | \$1,709.40 | | \$0.00 | | \$0.00 | \$0.00 | \$2,849.00 |
| Project BJ-1 Total | | | | | \$90,745.98 | | \$15,188.40 | | \$119,349.82 | | \$29,500.00 | \$22,000.00 | \$276,784.20 |
| Grand Total | | | | | \$90,745.98 | | \$15,188.40 | | \$119,349.82 | | \$29,500.00 | \$22,000.00 | \$276,784.20 |

| Category | Percent | Amount |
|-------------------------------------|---------|------------------|
| Labor | 32.79% | \$90,746 |
| Material | 5.49% | \$15,188 |
| Equipment | 43.12% | \$119,350 |
| Subcontractor | 10.66% | \$29,500 |
| Other | 7.95% | \$22,000 |
| Net Costs | | \$276,784 |
| Labor Mark-up | 18.00% | \$16,334 |
| Material Mark-up | 15.00% | \$2,278 |
| Subcontractor Mark-up | 5.00% | \$1,475 |
| Equipment Mark-up | 15.00% | \$17,902 |
| Sales tax (material) | 7.75% | \$1,177 |
| Sales tax (equipment) | 7.75% | \$9,250 |
| Material Shipping & Handling | 2.50% | \$380 |
| Worker's Travel/Subsistence | 0.10% | \$91 |
| Subtotal | | \$325,671 |
| Contractor General Conditions | 12.00% | \$39,081 |
| Subtotal | | \$364,752 |
| Earthquake Insurance | 0.10% | \$365 |
| Subtotal | | \$365,117 |
| Construction Contingency | 20.00% | \$73,023 |
| Subtotal | | \$438,140 |
| Bldg Risk, Liability Auto Ins. | 2.00% | \$8,763 |
| Subtotal | | \$446,903 |
| Performance Bond | 1.00% | \$4,469 |
| Payment Bond | 1.00% | \$4,469 |
| Subtotal | | \$455,841 |
| Engineering Fee | 10.00% | \$27,678 |
| Environmental Permitting (Lump Sum) | - | \$17,000 |
| Total Estimate | | \$500,519 |



City of Carlsbad, Drainage Master Plan

| | |
|--------------------------------|------------------|
| Project Number:: | 128290 |
| Client:: | City of Carlsbad |
| Estimator(s):: | JW / DG |
| Estimating Office:: | Walnut Creek |
| Estimate Issue Number:: | 01 |
| Estimate Original Issue Date:: | 3/14/2006 |
| Estimate Revision Number:: | 04 |
| Estimate Revision Date:: | 6/27/2008 |
| BC Project Manager:: | Chris Herencia |
| Estimate QA/QC Reviewer:: | Butch Matthews |
| Estimate QA/QC Date:: | 6/27/2008 |

PROJECT LOCATION / PROCESS AREA

Project BJB - Located in Basin B

| Item | Item Description | Quantity | Unit | Labor \$/Unit | Labor Amount | Materials \$/Unit | Materials Amount | Equip \$/Unit | Equip Amount | Total \$/Unit | Subs Amount | Other Amount | Grand Total |
|------------------------------------|--|----------|------|---------------|--------------------|-------------------|--------------------|---------------|--------------------|-----------------|---------------|--------------------|--------------------|
| Project BJB | | | | | | | | | | | | | |
| 02 - SITE CONSTRUCTION | | | | | | | | | | | | | |
| 02340 - Bedding | | | | | | | | | | | | | |
| | Backing Material class #1 | 150 | Cuyd | \$17.00 | \$2,550.00 | \$60.00 | \$9,000.00 | \$20.00 | \$3,000.00 | \$97 / Cuyd | \$0.00 | \$0.00 | \$14,550.00 |
| 02360 - Compaction | | | | | | | | | | | | | |
| | Compaction, trench, walk behind, vib.. Plate | 80 | Cuyd | \$1.90 | \$152.00 | \$0.00 | \$0.00 | \$0.51 | \$40.80 | \$2.41 / Cuyd | \$0.00 | \$0.00 | \$192.80 |
| 02450 - Excavating | | | | | | | | | | | | | |
| | Excavating, bulk bank measure, FE loader, whl mtd, 1.5 CY cap = 80 | 440 | Cuyd | \$1.95 | \$858.00 | \$0.00 | \$0.00 | \$1.42 | \$624.80 | \$3.37 / Cuyd | \$0.00 | \$0.00 | \$1,482.80 |
| 02460 - Hauling | | | | | | | | | | | | | |
| | Disposal fee | 25 | Trk | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$105 / Trk | \$0.00 | \$2,625.00 | \$2,625.00 |
| | Hauling, LCY, no loading, 12 c.y. dump truck, 20 MI RT, 0.4 lds/hr | 440 | Cuyd | \$7.18 | \$3,159.20 | \$3.00 | \$1,320.00 | \$15.45 | \$6,796.43 | \$25.63 / Cuyd | \$0.00 | \$0.00 | \$11,275.63 |
| | Loading Trucks, F.E. Loader, 3 C.Y., clear & grub | 440 | Cuyd | \$0.74 | \$325.60 | \$0.00 | \$0.00 | \$1.24 | \$545.60 | \$1.98 / Cuyd | \$0.00 | \$0.00 | \$871.20 |
| 02470 - Soil stabilization | | | | | | | | | | | | | |
| | Soil stabilization, geotextile fabric, woven, H.D., 600 lb. tensile st | 525 | Sqyd | \$0.32 | \$168.00 | \$1.85 | \$971.25 | \$0.00 | \$0.00 | \$2.17 / Sqyd | \$0.00 | \$0.00 | \$1,139.25 |
| 02480 - Rip-rap | | | | | | | | | | | | | |
| | Rip-rap, gabions, galv steel mesh boxes, stone filled, 36" deep | 290 | Cuyd | \$49.95 | \$14,485.50 | \$60.56 | \$17,562.40 | \$16.44 | \$4,767.60 | \$126.95 / Cuyd | \$0.00 | \$0.00 | \$36,815.50 |
| SITE CONSTRUCTION Total | | | | | \$21,698.30 | | \$28,853.65 | | \$15,775.23 | | \$0.00 | \$2,625.00 | \$68,952.18 |
| 03 - CONCRETE | | | | | | | | | | | | | |
| 03150 - Concrete, ready mix | | | | | | | | | | | | | |
| | Wing wall for 7'X11' box culvert | 9 | Cuyd | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$1000 / Cuyd | \$0.00 | \$9,000.00 | \$9,000.00 |
| CONCRETE Total | | | | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | \$9,000.00 | \$9,000.00 |
| Project BJB Total | | | | | \$21,698.30 | | \$28,853.65 | | \$15,775.23 | | \$0.00 | \$11,625.00 | \$77,952.18 |
| Grand Total | | | | | \$21,698.30 | | \$28,853.65 | | \$15,775.23 | | \$0.00 | \$11,625.00 | \$77,952.18 |

| Category | Percent | Amount |
|-------------------------------------|---------|------------------|
| Labor | 27.84% | \$21,698 |
| Material | 37.01% | \$28,854 |
| Equipment | 20.24% | \$15,775 |
| Subcontractor | 0.00% | \$0 |
| Other | 14.91% | \$11,625 |
| Net Costs | | \$77,952 |
| Labor Mark-up | 18.00% | \$3,906 |
| Material Mark-up | 15.00% | \$4,328 |
| Subcontractor Mark-up | 5.00% | \$0 |
| Equipment Mark-up | 15.00% | \$2,366 |
| Sales tax (material) | 7.75% | \$2,236 |
| Sales tax (equipment) | 7.75% | \$1,223 |
| Material Shipping & Handling | 2.50% | \$721 |
| Worker's Travel/Subsistence | 0.10% | \$22 |
| Subtotal | | \$92,754 |
| Contractor General Conditions | 12.00% | \$11,130 |
| Subtotal | | \$103,884 |
| Earthquake Insurance | 0.10% | \$104 |
| Subtotal | | \$103,988 |
| Construction Contingency | 25.00% | \$25,997 |
| Subtotal | | \$129,985 |
| Bldg Risk, Liability Auto Ins. | 2.00% | \$2,600 |
| Subtotal | | \$132,585 |
| Performance Bond | 1.00% | \$1,326 |
| Payment Bond | 1.00% | \$1,326 |
| Subtotal | | \$135,237 |
| Engineering Fee | 10.00% | \$7,795 |
| Environmental Permitting (Lump Sum) | - | \$10,000 |
| Total Estimate | | \$153,032 |



City of Carlsbad, Master Drainage Plan

| | |
|--------------------------------|------------------|
| Project Number:: | 128290 |
| Client:: | City of Carlsbad |
| Estimator(s):: | SB / DG |
| Estimating Office:: | Walnut Creek |
| Estimate Issue Number:: | 01 |
| Estimate Original Issue Date:: | 5/11/2006 |
| Estimate Revision Number:: | 04 |
| Estimate Revision Date:: | 6/27/2008 |
| BC Project Manager:: | Chris Herencia |
| Estimate QA/QC Reviewer:: | Bob Ferguson |
| Estimate QA/QC Date:: | 6/27/2008 |

PROJECT LOCATION / PROCESS AREA

Project BL-U - Located in Basin B

| Item | Item Description | Quantity | Unit | Labor \$/Unit | Labor Amount | Materials \$/Unit | Materials Amount | Equip \$/Unit | Equip Amount | Total \$/Unit | Subs Amount | Other Amount | Grand Total |
|---|---|----------|------|---------------|--------------------|-------------------|---------------------|---------------|--------------------|------------------|---------------|-------------------|---------------------|
| Project BL-U | | | | | | | | | | | | | |
| 01 - GENERAL REQUIREMENTS | | | | | | | | | | | | | |
| 01200 - General equipment rental | | | | | | | | | | | | | |
| | Trench box, 9500 lbs, 8'x 20' | 10 | Day | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$240.00 | \$2,400.00 | \$240 / Day | \$0.00 | \$0.00 | \$2,400.00 |
| | Trench Plates allowance | 1 | Mo | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$900.00 | \$900.00 | \$900 / Mo | \$0.00 | \$0.00 | \$900.00 |
| | GENERAL REQUIREMENTS Total | | | | \$0.00 | | \$0.00 | | \$3,300.00 | | \$0.00 | \$0.00 | \$3,300.00 |
| 02 - SITE CONSTRUCTION | | | | | | | | | | | | | |
| 02020 - Underground marking tape | | | | | | | | | | | | | |
| | Underground tape, detectable aluminum, 2" | 8 | Clf | \$2.34 | \$18.72 | \$3.06 | \$24.48 | \$0.00 | \$0.00 | \$5.4 / Clf | \$0.00 | \$0.00 | \$43.20 |
| 02320 - Backfill | | | | | | | | | | | | | |
| | Backfill, dozer backfilling, trench, up to 300' haul, no compaction | 943 | Cuyd | \$0.80 | \$754.40 | \$0.00 | \$0.00 | \$1.28 | \$1,207.04 | \$2.08 / Cuyd | \$0.00 | \$0.00 | \$1,961.44 |
| 02340 - Bedding | | | | | | | | | | | | | |
| | Bedding, crushed stone 3/4" to 1/2" | 737 | Cuyd | \$8.47 | \$6,242.39 | \$32.03 | \$23,606.11 | \$1.89 | \$1,392.93 | \$42.39 / Cuyd | \$0.00 | \$0.00 | \$31,241.43 |
| 02360 - Compaction | | | | | | | | | | | | | |
| | Compaction, walk behind, vibrating roller 24" W, 6" lifts, 2 passes | 93 | Cuyd | \$1.90 | \$176.70 | \$0.00 | \$0.00 | \$0.51 | \$47.43 | \$2.41 / Cuyd | \$0.00 | \$0.00 | \$224.13 |
| | Compaction, rammer tamper, 6" to 11", 4" lifts, bedding | 634 | Cuyd | \$2.93 | \$1,857.62 | \$0.00 | \$0.00 | \$0.78 | \$494.52 | \$3.71 / Cuyd | \$0.00 | \$0.00 | \$2,352.14 |
| | Compaction, rammer tamper, 6" to 11", 4" lifts, backfill | 849 | Cuyd | \$2.93 | \$2,487.57 | \$0.00 | \$0.00 | \$0.78 | \$662.22 | \$3.71 / Cuyd | \$0.00 | \$0.00 | \$3,149.79 |
| 02450 - Excavating, trench | | | | | | | | | | | | | |
| | Excavate trench, common earth curb, 6'-10' deep, 1-1/2 CY hyd | 1729 | Cuyd | \$1.76 | \$3,043.04 | \$0.00 | \$0.00 | \$1.28 | \$2,213.12 | \$3.04 / Cuyd | \$0.00 | \$0.00 | \$5,256.16 |
| 02460 - Hauling | | | | | | | | | | | | | |
| | Hauling, LCY, no loading, 20 c.y. dump truck, 30 MI RT, 0.33 lds/hr | 1218 | Cuyd | \$5.95 | \$7,247.10 | \$0.00 | \$0.00 | \$10.40 | \$12,667.20 | \$16.35 / Cuyd | \$0.00 | \$0.00 | \$19,914.30 |
| | Loading Trucks, F.E. Loader, 3 C.Y.. | 1218 | Cuyd | \$0.74 | \$901.32 | \$0.00 | \$0.00 | \$1.24 | \$1,510.32 | \$1.98 / Cuyd | \$0.00 | \$0.00 | \$2,411.64 |
| 02490 - Erosion control | | | | | | | | | | | | | |
| | Erosion control allowance: | 1 | Lsum | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$2614 / Lsum | \$0.00 | \$2,614.00 | \$2,614.00 |
| 02570 - Catch basins or manholes | | | | | | | | | | | | | |
| | Junction structure | 2 | Each | \$680.00 | \$1,360.00 | \$6,000.00 | \$12,000.00 | \$0.00 | \$0.00 | \$6680 / Each | \$0.00 | \$0.00 | \$13,360.00 |
| | CB or manholes, conc, precast, 4' ID, 6' deep | 4 | Each | \$549.75 | \$2,199.00 | \$1,050.00 | \$4,200.00 | \$148.32 | \$593.28 | \$1748.07 / Each | \$0.00 | \$0.00 | \$6,992.28 |
| | CB or manholes, conc, slab tops, precast, 8" thick, 4' dia | 4 | Each | \$158.75 | \$635.00 | \$201.00 | \$804.00 | \$35.44 | \$141.76 | \$395.19 / Each | \$0.00 | \$0.00 | \$1,580.76 |
| | Catch basns or manholes, frs and covs, hvy traffic, 24" diam, 400 lb. | 4 | Each | \$162.82 | \$651.28 | \$260.00 | \$1,040.00 | \$36.35 | \$145.40 | \$459.17 / Each | \$0.00 | \$0.00 | \$1,836.68 |
| | CB or manholes, inverts, single channel brick, concrete | 4 | Each | \$144.00 | \$576.00 | \$100.00 | \$400.00 | \$0.00 | \$0.00 | \$244 / Each | \$0.00 | \$0.00 | \$976.00 |
| | Catch basins or manholes, steps, standard sizes, aluminum | 12 | Each | \$9.66 | \$115.92 | \$26.50 | \$318.00 | \$0.00 | \$0.00 | \$36.16 / Each | \$0.00 | \$0.00 | \$433.92 |
| | Cleanout | 1 | Each | \$1,019.00 | \$1,019.00 | \$1,560.00 | \$1,560.00 | \$249.00 | \$249.00 | \$2828 / Each | \$0.00 | \$0.00 | \$2,828.00 |
| | SITE CONSTRUCTION Total | | | | \$29,285.06 | | \$43,952.59 | | \$21,324.22 | | \$0.00 | \$2,614.00 | \$97,175.87 |
| 15 - MECHANICAL | | | | | | | | | | | | | |
| 15090 - Pipe, drng&sewage, concret | | | | | | | | | | | | | |
| | Piping, drainage & sewage, RCP, class 3, no gaskets, 39" dia | 800 | Lnft | \$39.70 | \$31,760.00 | \$78.00 | \$62,400.00 | \$3.94 | \$3,152.00 | \$121.64 / Lnft | \$0.00 | \$0.00 | \$97,312.00 |
| | Piping, water dist, conc pipe, gasket, 39" dia | 80 | Each | \$3.14 | \$251.20 | \$9.20 | \$736.00 | \$0.00 | \$0.00 | \$12.34 / Each | \$0.00 | \$0.00 | \$987.20 |
| | MECHANICAL Total | | | | \$32,011.20 | | \$63,136.00 | | \$3,152.00 | | \$0.00 | \$0.00 | \$98,299.20 |
| | Project BL-U Total | | | | \$61,296.26 | | \$107,088.59 | | \$27,776.22 | | \$0.00 | \$2,614.00 | \$198,775.07 |
| | Grand Total | | | | \$61,296.26 | | \$107,088.59 | | \$27,776.22 | | \$0.00 | \$2,614.00 | \$198,775.07 |

| Category | Percent | Amount |
|-------------------------------------|---------|------------------|
| Labor | 5.20% | \$61,296 |
| Material | 9.09% | \$107,089 |
| Equipment | 2.36% | \$27,776 |
| Subcontractor | 0.00% | \$0 |
| Other | 0.22% | \$2,614 |
| Net Costs | | \$198,775 |
| Labor Mark-up | 18.00% | \$11,033 |
| Material Mark-up | 15.00% | \$16,063 |
| Subcontractor Mark-up | 5.00% | \$0 |
| Equipment Mark-up | 15.00% | \$4,166 |
| Sales tax (material) | 7.75% | \$8,299 |
| Sales tax (equipment) | 7.75% | \$2,153 |
| Material Shipping & Handling | 2.50% | \$2,677 |
| Worker's Travel/Subsistence | 0.10% | \$61 |
| Subtotal | | \$243,229 |
| Contractor General Conditions | 12.00% | \$29,187 |
| Subtotal | | \$272,416 |
| Earthquake Insurance | 0.10% | \$272 |
| Subtotal | | \$272,689 |
| Construction Contingency | 25.00% | \$68,172 |
| Subtotal | | \$340,861 |
| Bldg Risk, Liability Auto Ins. | 2.00% | \$6,817 |
| Subtotal | | \$347,678 |
| Performance Bond | 1.00% | \$3,477 |
| Payment Bond | 1.00% | \$3,477 |
| Subtotal | | \$354,631 |
| Engineering Fee | 10.00% | \$19,878 |
| Environmental Permitting (Lump Sum) | - | \$10,000 |
| Total Estimate | | \$384,509 |



City of Carlsbad, Master Drainage Plan

| | |
|--------------------------------|------------------|
| Project Number:: | 128290 |
| Client:: | City of Carlsbad |
| Estimator(s):: | SB / DG |
| Estimating Office:: | Walnut Creek |
| Estimate Issue Number:: | 01 |
| Estimate Original Issue Date:: | 5/12/2006 |
| Estimate Revision Number:: | 04 |
| Estimate Revision Date:: | 6/27/2008 |
| BC Project Manager:: | Chris Herencia |
| Estimate QA/QC Reviewer:: | Bob Ferguson |
| Estimate QA/QC Date:: | 6/27/2008 |

PROJECT LOCATION / PROCESS AREA

Project BL-L - Located in Basin B

| Item | Item Description | Quantity | Unit | Labor \$/Unit | Labor Amount | Materials \$/Unit | Materials Amount | Equip \$/Unit | Equip Amount | Total \$/Unit | Subs Amount | Other Amount | Grand Total |
|--|---|----------|------|---------------|-------------------|-------------------|------------------|---------------|-------------------|----------------|-----------------|-------------------|-------------------|
| Project BL-L | | | | | | | | | | | | | |
| 01 - GENERAL REQUIREMENTS | | | | | | | | | | | | | |
| 01200 - General equipment rental | | | | | | | | | | | | | |
| | Trench box, 9500 lbs, 8'x 20' | 1 | Day | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$240.00 | \$240.00 | \$240 / Day | \$0.00 | \$0.00 | \$240.00 |
| | Trench Plates allowance | 1 | Mo | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$900.00 | \$900.00 | \$900 / Mo | \$0.00 | \$0.00 | \$900.00 |
| | GENERAL REQUIREMENTS Total | | | | \$0.00 | | \$0.00 | | \$1,140.00 | | \$0.00 | \$0.00 | \$1,140.00 |
| 02 SITE CONSTRUCTION | | | | | | | | | | | | | |
| 02060 - Site demolition | | | | | | | | | | | | | |
| | Site dml, no hauling, pavement removal, bit, 4" to 6" thick | 10 | Sqyd | \$5.29 | \$52.90 | \$0.00 | \$0.00 | \$3.49 | \$34.90 | \$8.78 / Sqyd | \$0.00 | \$0.00 | \$87.80 |
| | Asphalt disposal - hauling and disposal fee, 4" thick | 1 | Sqyd | \$1.00 | \$1.00 | \$4.70 | \$4.70 | \$1.32 | \$1.32 | \$7.02 / Sqyd | \$0.00 | \$0.00 | \$7.02 |
| 02170 - Saw cutting | | | | | | | | | | | | | |
| | Saw cutting, asphalt, up to 3" deep | 65 | Lnft | \$0.48 | \$31.20 | \$0.07 | \$4.55 | \$0.26 | \$16.90 | \$0.81 / Lnft | \$0.00 | \$0.00 | \$52.65 |
| | Saw cutting, asphalt, after 3" deep; each addl inch of depth | 65 | Lnft | \$0.82 | \$53.30 | \$0.30 | \$19.50 | \$0.44 | \$28.60 | \$1.56 / Lnft | \$0.00 | \$0.00 | \$101.40 |
| 02310 - Fine grade | | | | | | | | | | | | | |
| | Fine grade under asphalt | 10 | Sqyd | \$0.26 | \$2.60 | \$0.00 | \$0.00 | \$0.21 | \$2.10 | \$0.47 / Sqyd | \$0.00 | \$0.00 | \$4.70 |
| 02320 - Backfill | | | | | | | | | | | | | |
| | Backfill, dozer backfilling, trench, no compaction | 33 | Cuyd | \$0.80 | \$26.40 | \$0.00 | \$0.00 | \$1.28 | \$42.24 | \$2.08 / Cuyd | \$0.00 | \$0.00 | \$68.64 |
| 02340 - Bedding | | | | | | | | | | | | | |
| | Bedding, crushed stone 3/4" to 1/2" | 9 | Cuyd | \$8.47 | \$72.00 | \$32.03 | \$272.26 | \$1.89 | \$16.07 | \$42.39 / Cuyd | \$0.00 | \$0.00 | \$360.32 |
| 02360 - Compaction | | | | | | | | | | | | | |
| | Compaction, walk behind, vibrating roller 24" W, 6" lifts, 2 passes | 74 | Cuyd | \$1.90 | \$140.60 | \$0.00 | \$0.00 | \$0.51 | \$37.74 | \$2.41 / Cuyd | \$0.00 | \$0.00 | \$178.34 |
| | Compaction, rammer tamper, 6" to 11", 4" lifts, bedding | 74 | Cuyd | \$2.93 | \$216.82 | \$0.00 | \$0.00 | \$0.78 | \$57.72 | \$3.71 / Cuyd | \$0.00 | \$0.00 | \$274.54 |
| | Compaction, rammer tamper, 6" to 11", 4" lifts, backfill | 74 | Cuyd | \$2.93 | \$216.82 | \$0.00 | \$0.00 | \$0.78 | \$57.72 | \$3.71 / Cuyd | \$0.00 | \$0.00 | \$274.54 |
| 02450 - Excavating, trench | | | | | | | | | | | | | |
| | Excavate trench, common earth curb, 6'-10' deep, 1-1/2 CY hyd | 107 | Cuyd | \$1.76 | \$188.32 | \$0.00 | \$0.00 | \$1.28 | \$136.96 | \$3.04 / Cuyd | \$0.00 | \$0.00 | \$325.28 |
| 02460 - Hauling | | | | | | | | | | | | | |
| | Hauling, LCY, no loading, 20 c.y. dump truck, 30 MI RT, 0.33 lds/hr | 74 | Cuyd | \$5.95 | \$440.30 | \$0.00 | \$0.00 | \$10.40 | \$769.60 | \$16.35 / Cuyd | \$0.00 | \$0.00 | \$1,209.90 |
| | Loading Trucks, F.E. Loader, 3 C.Y.. | 74 | Cuyd | \$0.74 | \$54.76 | \$0.00 | \$0.00 | \$1.24 | \$91.76 | \$1.98 / Cuyd | \$0.00 | \$0.00 | \$146.52 |
| | Disposal fee | 4 | Trk | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$105 / Trk | \$0.00 | \$388.50 | \$388.50 |
| 02490 - Erosion control | | | | | | | | | | | | | |
| | Erosion control allowance:: | 1 | Lsum | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$500 / Lsum | \$0.00 | \$500.00 | \$500.00 |
| 02600 - Base course | | | | | | | | | | | | | |
| | Base course, large areas, crushed 3/4" stone, compacted to 9" deep | 10 | Sqyd | \$0.80 | \$8.00 | \$8.06 | \$80.60 | \$1.02 | \$10.20 | \$9.88 / Sqyd | \$0.00 | \$0.00 | \$98.80 |
| 02610 - Asphalt concrete pavement | | | | | | | | | | | | | |
| | Asphaltic conc pavement, pavement replacement over trench, 4" thick | 10 | Sqyd | \$35.00 | \$350.00 | \$18.00 | \$180.00 | \$2.98 | \$29.80 | \$55.98 / Sqyd | \$0.00 | \$0.00 | \$559.80 |
| 02840 - Landscaping | | | | | | | | | | | | | |
| | Landscaping Allowance: | 1 | Lsum | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$500 / Lsum | \$500.00 | \$0.00 | \$500.00 |
| | Traffic Control Allowance: | 1 | Lsum | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$500 / Lsum | \$0.00 | \$500.00 | \$500.00 |
| | SITE CONSTRUCTION Total | | | | \$1,855.02 | | \$561.61 | | \$1,333.63 | | \$500.00 | \$1,388.50 | \$5,638.75 |

| Item | Item Description | Quantity | Unit | Labor \$/Unit | Labor Amount | Materials \$/Unit | Materials Amount | Equip \$/Unit | Equip Amount | Total \$/Unit | Subs Amount | Other Amount | Grand Total |
|---|---|----------|------|---------------|--------------------|-------------------|--------------------|---------------|--------------------|-----------------|--------------------|---------------------|---------------------|
| 15 - MECHANICAL | | | | | | | | | | | | | |
| <i>15090 - Pipe, drng&sewage, concret</i> | | | | | | | | | | | | | |
| | Piping, drainage & sewage, RCP, class 3, no gaskets, 90" dia | 20 | Lnft | \$125.05 | \$2,501.00 | \$450.00 | \$9,000.00 | \$12.40 | \$248.00 | \$587.45 / Lnft | \$0.00 | \$0.00 | \$11,749.00 |
| | Piping, water dist, conc pipe, gasket, 90" dia | 2 | Each | \$3.14 | \$6.28 | \$36.00 | \$72.00 | \$0.00 | \$0.00 | \$39.14 / Each | \$0.00 | \$0.00 | \$78.28 |
| | MECHANICAL Total | | | | \$2,507.28 | | \$9,072.00 | | \$248.00 | | \$0.00 | \$0.00 | \$11,827.28 |
| | Project BL-L (90 inch RCP) Total | | | | \$4,362.30 | | \$9,633.61 | | \$2,721.63 | | \$500.00 | \$1,388.50 | \$18,606.03 |
| <i>Project BL-L - Bridge</i> | | | | | | | | | | | | | |
| 01 - GENERAL REQUIREMENTS | | | | | | | | | | | | | |
| <i>01210 - Lifting and hoisting equipment</i> | | | | | | | | | | | | | |
| | Rent crane truck mounted, hydraulic, 55 ton capacity | 30 | Day | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$990.00 | \$29,700.00 | \$28038 / Day | \$27,048.00 | \$0.00 | \$56,748.00 |
| | GENERAL REQUIREMENTS Total | | | | \$0.00 | | \$0.00 | | \$29,700.00 | | \$27,048.00 | \$0.00 | \$56,748.00 |
| 02 SITE CONSTRUCTION | | | | | | | | | | | | | |
| <i>02280 - Sheet piling</i> | | | | | | | | | | | | | |
| | Sheet piling, steel, no wales, 15' excav., drive, extract & salvage | 2700 | Sqft | \$14.03 | \$37,881.00 | \$11.41 | \$30,807.00 | \$10.60 | \$28,620.00 | \$36.04 / Sqft | \$0.00 | \$0.00 | \$97,308.00 |
| <i>02340 - Bedding</i> | | | | | | | | | | | | | |
| | Bedding, crushed stone 3/4" to 1/2" | 52 | Cuyd | \$8.47 | \$440.44 | \$32.03 | \$1,665.56 | \$1.89 | \$98.28 | \$42.39 / Cuyd | \$0.00 | \$0.00 | \$2,204.28 |
| <i>02360 - Compaction</i> | | | | | | | | | | | | | |
| | Compaction, walk behind, vibrating plate 18" wide, subgrade | 25 | Cuyd | \$1.90 | \$47.50 | \$0.00 | \$0.00 | \$0.51 | \$12.75 | \$2.41 / Cuyd | \$0.00 | \$0.00 | \$60.25 |
| | Compaction, walk behind, vibrating plate 18" wide, bedding | 50 | Cuyd | \$1.90 | \$95.00 | \$0.00 | \$0.00 | \$0.51 | \$25.50 | \$2.41 / Cuyd | \$0.00 | \$0.00 | \$120.50 |
| <i>02420 - Excavating, structural</i> | | | | | | | | | | | | | |
| | Excavating, structural, mach excav, com earth, hyd backhoe, 2 CY | 2000 | Cuyd | \$5.28 | \$10,560.00 | \$0.00 | \$0.00 | \$6.70 | \$13,400.00 | \$11.98 / Cuyd | \$0.00 | \$0.00 | \$23,960.00 |
| <i>02420 - Hauling</i> | | | | | | | | | | | | | |
| | Hauling, LCY, no loading, 20 c.y. dump truck, 30 MI RT, 0.33 lds/hr | 2600 | Cuyd | \$5.95 | \$15,470.00 | \$0.00 | \$0.00 | \$10.40 | \$27,040.00 | \$16.35 / Cuyd | \$0.00 | \$0.00 | \$42,510.00 |
| | Loading Trucks, F.E. Loader, 3 C.Y.. | 2600 | Cuyd | \$0.74 | \$1,924.00 | \$0.00 | \$0.00 | \$1.24 | \$3,224.00 | \$1.98 / Cuyd | \$0.00 | \$0.00 | \$5,148.00 |
| | Disposal fee | 130 | Trk | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$105 / Trk | \$0.00 | \$13,650.00 | \$13,650.00 |
| | SITE CONSTRUCTION Total | | | | \$66,417.94 | | \$32,472.56 | | \$72,420.53 | | \$0.00 | \$0.00 | \$184,961.03 |
| 03 - CONCRETE | | | | | | | | | | | | | |
| <i>03150 - Concrete, ready mix</i> | | | | | | | | | | | | | |
| | Wall, bridge | 278 | Cuyd | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$1000 / Cuyd | \$0.00 | \$278,000.00 | \$278,000.00 |
| | Footing | 32 | Cuyd | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$1000 / Cuyd | \$0.00 | \$32,000.00 | \$32,000.00 |
| | Elevated slab | 32 | Cuyd | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$1000 / Cuyd | \$0.00 | \$32,000.00 | \$32,000.00 |
| | Headwall | 10 | Cuyd | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$1000 / Cuyd | \$0.00 | \$10,000.00 | \$10,000.00 |
| | CONCRETE Total | | | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | \$352,000.00 | \$352,000.00 |

| Item | Item Description | Quantity | Unit | Labor \$/Unit | Labor Amount | Materials \$/Unit | Materials Amount | Equip \$/Unit | Equip Amount | Total \$/Unit | Subs Amount | Other Amount | Grand Total |
|---|-----------------------------|----------|------|---------------|--------------------|-------------------|--------------------|---------------|---------------------|-----------------|--------------------|---------------------|---------------------|
| <i>05 - METALS</i> | | | | | | | | | | | | | |
| <i>05010 - Misc Metals</i> | | | | | | | | | | | | | |
| | Misc metals, allowance | 1 | Lsum | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$500 / Lsum | \$0.00 | \$500.00 | \$500.00 |
| <i>05040 - Structural steel members</i> | | | | | | | | | | | | | |
| | Struct stl, WF, W 36 x 170 | 270 | Lnft | \$4.66 | \$1,258.20 | \$192.44 | \$51,958.80 | \$1.87 | \$504.90 | \$198.97 / Lnft | \$0.00 | \$0.00 | \$53,721.90 |
| | <i>MECHANICAL Total</i> | | | | <i>\$1,258.20</i> | | <i>\$51,958.80</i> | | <i>\$504.90</i> | | <i>\$0.00</i> | <i>\$500.00</i> | <i>\$54,221.90</i> |
| | <i>Project Bridge Total</i> | | | | <i>\$67,676.14</i> | | <i>\$84,431.36</i> | | <i>\$102,625.43</i> | | <i>\$27,048.00</i> | <i>\$352,500.00</i> | <i>\$647,930.93</i> |
| | <i>Project BL-L Total</i> | | | | <i>\$72,038.44</i> | | <i>\$94,064.97</i> | | <i>\$105,347.06</i> | | <i>\$27,548.00</i> | <i>\$353,888.50</i> | <i>\$666,536.96</i> |
| | <i>Grand Total</i> | | | | <i>\$72,038.44</i> | | <i>\$94,064.97</i> | | <i>\$105,347.06</i> | | <i>\$27,548.00</i> | <i>\$353,888.50</i> | <i>\$652,886.96</i> |

| Category | Percent | Amount |
|--------------------------------------|---------|--------------------|
| Labor | 6.11% | \$72,038 |
| Material | 7.98% | \$94,065 |
| Equipment | 8.94% | \$105,347 |
| Subcontractor | 2.34% | \$27,548 |
| Other | 30.03% | \$353,889 |
| Net Costs | | \$652,887 |
| Labor Mark-up | 18.00% | \$12,967 |
| Material Mark-up | 15.00% | \$14,110 |
| Subcontractor Mark-up | 5.00% | \$1,377 |
| Equipment Mark-up | 15.00% | \$15,802 |
| Sales tax (material) | 7.75% | \$7,290 |
| Sales tax (equipment) | 7.75% | \$8,164 |
| Material Shipping & Handling | 2.50% | \$2,352 |
| Worker's Travel/Subsistence | 0.10% | \$72 |
| Subtotal | | \$715,021 |
| Contractor General Conditions | 12.00% | \$85,803 |
| Subtotal | | \$800,824 |
| Earthquake Insurance | 0.10% | \$801 |
| Subtotal | | \$801,625 |
| Construction Contingency | 20.00% | \$160,325 |
| Subtotal | | \$961,949 |
| Bldg Risk, Liability Auto Ins. | 2.00% | \$19,239 |
| Subtotal | | \$981,188 |
| Performance Bond | 1.00% | \$9,812 |
| Payment Bond | 1.00% | \$9,812 |
| Subtotal | | \$1,000,812 |
| Engineering Fee | 10.00% | \$65,289 |
| Environ Permitting/Monitoring (L.S.) | - | \$750,000 |
| Total Estimate | | \$1,816,101 |



City of Carlsbad, Master Drainage Plan

| | |
|--------------------------------|------------------|
| Project Number:: | 128290 |
| Client:: | City of Carlsbad |
| Estimator(s):: | JW / DG |
| Estimating Office:: | Walnut Creek |
| Estimate Issue Number:: | 01 |
| Estimate Original Issue Date:: | 3/14/2006 |
| Estimate Revision Number:: | 04 |
| Estimate Revision Date:: | 6/27/2008 |
| BC Project Manager:: | Chris Herencia |
| Estimate QA/QC Reviewer:: | Butch Matthews |
| Estimate QA/QC Date:: | 6/27/2008 |

PROJECT LOCATION / PROCESS AREA

Project BM - Located in Basin B

| Item | Item Description | Quantity | Unit | Labor \$/Unit | Labor Amount | Materials \$/Unit | Materials Amount | Equip \$/Unit | Equip Amount | Total \$/Unit | Subs Amount | Other Amount | Grand Total |
|------------------------------------|---|----------|------|---------------|-------------------|-------------------|-------------------|---------------|-------------------|----------------|-----------------|---------------------|---------------------|
| Project BM | | | | | | | | | | | | | |
| 02 SITE CONSTRUCTION | | | | | | | | | | | | | |
| 02310 - Fine grade | | | | | | | | | | | | | |
| | Fine grade under asphalt | 293 | Sqyd | \$0.26 | \$76.18 | \$0.00 | \$0.00 | \$0.21 | \$61.53 | \$0.47 / Sqyd | \$0.00 | \$0.00 | \$137.71 |
| 02340 - Bedding | | | | | | | | | | | | | |
| | Bedding, crushed stone 3/4" to 1/2" | 125 | Cuyd | \$8.47 | \$1,058.75 | \$32.03 | \$4,003.75 | \$1.89 | \$236.25 | \$42.39 / Cuyd | \$0.00 | \$0.00 | \$5,298.75 |
| 02360 - Compaction | | | | | | | | | | | | | |
| | Compaction, walk behind, vibrating roller 24" W, 6" lifts, 2 passes | 381 | Cuyd | \$1.90 | \$723.90 | \$0.00 | \$0.00 | \$0.51 | \$194.31 | \$2.41 / Cuyd | \$0.00 | \$0.00 | \$918.21 |
| | Compaction, rammer tamper, 6" to 11", 4" lifts, bedding | 381 | Cuyd | \$2.93 | \$1,116.33 | \$0.00 | \$0.00 | \$0.78 | \$297.18 | \$3.71 / Cuyd | \$0.00 | \$0.00 | \$1,413.51 |
| | Compaction, rammer tamper, 6" to 11", 4" lifts, backfill | 381 | Cuyd | \$2.93 | \$1,116.33 | \$0.00 | \$0.00 | \$0.78 | \$297.18 | \$3.71 / Cuyd | \$0.00 | \$0.00 | \$1,413.51 |
| 02450 - Excavating, trench | | | | | | | | | | | | | |
| | Excavate trench, common earth curb, 4'-6' deep, 1-1/2 CY hyd | 636 | Cuyd | \$1.95 | \$1,240.20 | \$0.00 | \$0.00 | \$1.42 | \$903.12 | \$3.37 / Cuyd | \$0.00 | \$0.00 | \$2,143.32 |
| 02480 - Rip-rap | | | | | | | | | | | | | |
| | Rip-rap, energy dissipater | 34 | Sqyd | \$55.00 | \$1,870.00 | \$25.00 | \$850.00 | \$18.70 | \$635.80 | \$98.7 / Sqyd | \$0.00 | \$0.00 | \$3,355.80 |
| 02490 - Erosion control | | | | | | | | | | | | | |
| | Erosion control allowance: | 2 | Lsum | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$2614 / Lsum | \$0.00 | \$5,228.00 | \$5,228.00 |
| 02600 - Base course | | | | | | | | | | | | | |
| | Base course, large areas, crushed 3/4" stone, compacted to 9" deep | 376 | Sqyd | \$0.80 | \$300.80 | \$8.06 | \$3,030.56 | \$1.02 | \$383.52 | \$9.88 / Sqyd | \$0.00 | \$0.00 | \$3,714.88 |
| 02840 - Landscaping | | | | | | | | | | | | | |
| | Landscaping Allowance: | 1 | Lsum | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$500 / Lsum | \$500.00 | \$0.00 | \$500.00 |
| | Traffic Control Allowance: | 1 | Lsum | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$500 / Lsum | \$0.00 | \$500.00 | \$500.00 |
| | SITE CONSTRUCTION Total | | | | \$7,502.49 | | \$7,884.31 | | \$3,008.89 | | \$500.00 | \$5,728.00 | \$24,623.69 |
| 03 - CONCRETE | | | | | | | | | | | | | |
| 03150 - Concrete, ready mix | | | | | | | | | | | | | |
| | 5'x32" RCB Culvert | 99 | Cuyd | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$1000 / Cuyd | \$0.00 | \$99,000.00 | \$99,000.00 |
| | Headwall | 2 | Cuyd | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$1000 / Cuyd | \$0.00 | \$2,000.00 | \$2,000.00 |
| | Headwall | 2 | Cuyd | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$1000 / Cuyd | \$0.00 | \$2,000.00 | \$2,000.00 |
| | CONCRETE Total | | | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | \$103,000.00 | \$103,000.00 |
| | Project BM Total | | | | \$7,502.49 | | \$7,884.31 | | \$3,008.89 | | \$500.00 | \$108,728.00 | \$127,623.69 |
| | Grand Total | | | | \$7,502.49 | | \$7,884.31 | | \$3,008.89 | | \$500.00 | \$108,728.00 | \$127,623.69 |

| Category | Percent | Amount |
|-------------------------------------|---------|------------------|
| Labor | 0.64% | \$7,502 |
| Material | 0.67% | \$7,884 |
| Equipment | 0.26% | \$3,009 |
| Subcontractor | 0.04% | \$500 |
| Other | 9.23% | \$108,728 |
| Net Costs | | \$127,624 |
| Labor Mark-up | 18.00% | \$1,350 |
| Material Mark-up | 15.00% | \$1,183 |
| Subcontractor Mark-up | 5.00% | \$25 |
| Equipment Mark-up | 15.00% | \$451 |
| Sales tax (material) | 7.75% | \$611 |
| Sales tax (equipment) | 7.75% | \$233 |
| Material Shipping & Handling | 2.50% | \$197 |
| Worker's Travel/Subsistence | 0.10% | \$8 |
| Subtotal | | \$131,682 |
| Contractor General Conditions | 12.00% | \$15,802 |
| Subtotal | | \$147,484 |
| Earthquake Insurance | 0.10% | \$147 |
| Subtotal | | \$147,631 |
| Construction Contingency | 20.00% | \$29,526 |
| Subtotal | | \$177,158 |
| Bldg Risk, Liability Auto Ins. | 2.00% | \$3,543 |
| Subtotal | | \$180,701 |
| Performance Bond | 1.00% | \$1,807 |
| Payment Bond | 1.00% | \$1,807 |
| Subtotal | | \$184,315 |
| Engineering Fee | 10.00% | \$12,762 |
| Environmental Permitting (Lump Sum) | - | \$7,000 |
| Total Estimate | | \$204,077 |



City of Carlsbad, Drainage Master Plan

| | |
|--------------------------------|------------------|
| Project Number:: | 128290 |
| Client:: | City of Carlsbad |
| Estimator(s):: | SB / DG |
| Estimating Office:: | Walnut Creek |
| Estimate Issue Number:: | 01 |
| Estimate Original Issue Date:: | 5/12/2006 |
| Estimate Revision Number:: | 04 |
| Estimate Revision Date:: | 6/27/2008 |
| BC Project Manager:: | Chris Herencia |
| Estimate QA/QC Reviewer:: | Bob Ferguson |
| Estimate QA/QC Date:: | 6/27/2008 |

PROJECT LOCATION / PROCESS AREA

Project BN - Located in Basin B

| Item | Item Description | Quantity | Unit | Labor \$/Unit | Labor Amount | Materials \$/Unit | Materials Amount | Equip \$/Unit | Equip Amount | Total \$/Unit | Subs Amount | Other Amount | Grand Total |
|---------------------------------------|--|----------|------|---------------|--------------------|-------------------|--------------------|---------------|--------------------|-----------------|---------------|--------------------|---------------------|
| Project BN | | | | | | | | | | | | | |
| 02 - SITE CONSTRUCTION | | | | | | | | | | | | | |
| 02060 - Site demolition | | | | | | | | | | | | | |
| | Site dml, conc7" to 24" thick, rod reinforced | 23 | Cuyd | \$92.56 | \$2,128.88 | \$0.00 | \$0.00 | \$61.09 | \$1,405.07 | \$153.65 / Cuyd | \$0.00 | \$0.00 | \$3,533.95 |
| 02420 - Excavating, structural | | | | | | | | | | | | | |
| | Excavating, structural, mach excav, com earth, hyd backhoe, 3 CY | 800 | Cuyd | \$5.28 | \$4,224.00 | \$0.00 | \$0.00 | \$6.70 | \$5,360.00 | \$11.98 / Cuyd | \$0.00 | \$0.00 | \$9,584.00 |
| | Excavating, structural, mach excav, com earth, hyd backhoe, 3 CY | 500 | Cuyd | \$5.28 | \$2,640.00 | \$0.00 | \$0.00 | \$6.70 | \$3,350.00 | \$11.98 / Cuyd | \$0.00 | \$0.00 | \$5,990.00 |
| 02430 - Fill | | | | | | | | | | | | | |
| | Fill, spread dumped material, by dozer, no compaction | 1400 | Cuyd | \$0.72 | \$1,008.00 | \$0.00 | \$0.00 | \$1.15 | \$1,610.00 | \$1.87 / Cuyd | \$0.00 | \$0.00 | \$2,618.00 |
| 02460 - Hauling | | | | | | | | | | | | | |
| | Disposal fee | 20 | Trk | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$105 / Trk | \$0.00 | \$2,100.00 | \$2,100.00 |
| | Hauling, LCY, no loading, 20 c.y. dump truck, 30 MI RT, 0.33 lds/hr, | 23 | Cuyd | \$5.95 | \$136.85 | \$0.00 | \$0.00 | \$10.40 | \$239.20 | \$16.35 / Cuyd | \$0.00 | \$0.00 | \$376.05 |
| | Hauling, LCY, no loading, 20 c.y. dump truck, 30 MI RT, 0.33 lds/hr | 2600 | Cuyd | \$5.95 | \$15,470.00 | \$0.00 | \$0.00 | \$10.40 | \$27,040.00 | \$16.35 / Cuyd | \$0.00 | \$0.00 | \$42,510.00 |
| | Hauling, LCY, no loading, 12 c.y. dump truck, 6 MI RT, 1 lds/hr | 1400 | Cuyd | \$10.52 | \$14,728.00 | \$0.00 | \$0.00 | \$18.95 | \$26,529.00 | \$29.47 / Cuyd | \$0.00 | \$0.00 | \$41,257.00 |
| | Loading Trucks, F.E. Loader, 3 C.Y.. | 2600 | Cuyd | \$0.74 | \$1,924.00 | \$0.00 | \$0.00 | \$1.24 | \$3,224.00 | \$1.98 / Cuyd | \$0.00 | \$0.00 | \$5,148.00 |
| | Loading Trucks, F.E. Loader, 3 C.Y., concrete | 23 | Cuyd | \$0.74 | \$17.02 | \$0.00 | \$0.00 | \$1.24 | \$28.52 | \$1.98 / Cuyd | \$0.00 | \$0.00 | \$45.54 |
| | Loading Trucks, F.E. Loader, 3 C.Y.. | 1400 | Cuyd | \$0.74 | \$1,036.00 | \$0.00 | \$0.00 | \$1.24 | \$1,736.00 | \$1.98 / Cuyd | \$0.00 | \$0.00 | \$2,772.00 |
| 02470 - Soil stabilization | | | | | | | | | | | | | |
| | Soil stabilization, geotextile fabric, woven, H.D., 600 lb. tensile st | 1667 | Sqyd | \$0.32 | \$533.44 | \$1.85 | \$3,083.95 | \$0.00 | \$0.00 | \$2.17 / Sqyd | \$0.00 | \$0.00 | \$3,617.39 |
| 02480 - Rip-rap | | | | | | | | | | | | | |
| | Backing Material class #1 | 33 | Cuyd | \$17.00 | \$561.00 | \$60.00 | \$1,980.00 | \$20.00 | \$660.00 | \$97 / Cuyd | \$0.00 | \$0.00 | \$3,201.00 |
| | Rip-rap, mach placed for slp protec, 18" min thick. not grouted | 155 | Sqyd | \$56.55 | \$8,765.25 | \$49.55 | \$7,680.25 | \$12.33 | \$1,911.15 | \$118.43 / Sqyd | \$0.00 | \$0.00 | \$18,356.65 |
| | Rip-rap, gabions, galv steel mesh boxes, stone filled | 165 | Cuyd | \$49.95 | \$8,241.75 | \$60.56 | \$9,992.40 | \$16.44 | \$2,712.60 | \$126.95 / Cuyd | \$0.00 | \$0.00 | \$20,946.75 |
| | SITE CONSTRUCTION Total | | | | \$61,414.19 | | \$22,736.60 | | \$75,805.54 | | \$0.00 | \$2,100.00 | \$162,056.33 |
| 03 - CONCRETE | | | | | | | | | | | | | |
| 03150 - Concrete, ready mix | | | | | | | | | | | | | |
| | Apron wall | 8 | Cuyd | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$1000 / Cuyd | \$0.00 | \$8,000.00 | \$8,000.00 |
| | CONCRETE Total | | | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | \$8,000.00 | \$8,000.00 |
| | Project BN Total | | | | \$61,414.19 | | \$22,736.60 | | \$75,805.54 | | \$0.00 | \$10,100.00 | \$170,056.33 |
| | Grand Total | | | | \$61,414.19 | | \$22,736.60 | | \$75,805.54 | | \$0.00 | \$10,100.00 | \$170,056.33 |

| Category | Percent | Amount |
|-------------------------------------|---------|------------------|
| Labor | 5.21% | \$61,414 |
| Material | 1.93% | \$22,737 |
| Equipment | 6.43% | \$75,806 |
| Subcontractor | 0.00% | \$0 |
| Other | 0.86% | \$10,100 |
| Net Costs | | \$170,056 |
| Labor Mark-up | 18.00% | \$11,055 |
| Material Mark-up | 15.00% | \$3,410 |
| Subcontractor Mark-up | 5.00% | \$0 |
| Equipment Mark-up | 15.00% | \$11,371 |
| Sales tax (material) | 7.75% | \$1,762 |
| Sales tax (equipment) | 7.75% | \$5,875 |
| Material Shipping & Handling | 2.50% | \$568 |
| Worker's Travel/Subsistence | 0.10% | \$61 |
| Subtotal | | \$204,159 |
| Contractor General Conditions | 12.00% | \$24,499 |
| Subtotal | | \$228,658 |
| Earthquake Insurance | 0.10% | \$229 |
| Subtotal | | \$228,887 |
| Construction Contingency | 25.00% | \$57,222 |
| Subtotal | | \$286,108 |
| Bldg Risk, Liability Auto Ins. | 2.00% | \$5,722 |
| Subtotal | | \$291,831 |
| Performance Bond | 1.00% | \$2,918 |
| Payment Bond | 1.00% | \$2,918 |
| Subtotal | | \$297,667 |
| Engineering Fee | 10.00% | \$17,006 |
| Environmental Permitting (Lump Sum) | - | \$42,000 |
| Total Estimate | | \$356,673 |



City of Carlsbad, Master Drainage Plan

| | |
|--------------------------------|------------------|
| Project Number:: | 128290 |
| Client:: | City of Carlsbad |
| Estimator(s):: | JW / DG |
| Estimating Office:: | Walnut Creek |
| Estimate Issue Number:: | 01 |
| Estimate Original Issue Date:: | 3/14/2006 |
| Estimate Revision Number:: | 04 |
| Estimate Revision Date:: | 6/27/2008 |
| BC Project Manager:: | Chris Herencia |
| Estimate QA/QC Reviewer:: | Butch Matthews |
| Estimate QA/QC Date:: | 6/27/2008 |

PROJECT LOCATION / PROCESS AREA

Project BNB - Located in Basin B

| Item | Item Description | Quantity | Unit | Labor \$/Unit | Labor Amount | Materials \$/Unit | Materials Amount | Equip \$/Unit | Equip Amount | Total \$/Unit | Subs Amount | Other Amount | Grand Total |
|--|---|----------|------|---------------|---------------------|-------------------|-----------------------|---------------|---------------------|-----------------|---------------|-------------------|-----------------------|
| Project BNB | | | | | | | | | | | | | |
| 02 - SITE CONSTRUCTION | | | | | | | | | | | | | |
| <i>02060 - Site demolition</i> | | | | | | | | | | | | | |
| | Site dml, no hauling, pavement removal, bit, 4" to 6" thick | 204 | Sqyd | \$5.29 | \$1,077.63 | \$0.00 | \$0.00 | \$3.49 | \$710.95 | \$8.78 / Sqyd | \$0.00 | \$0.00 | \$1,788.57 |
| <i>02320 - Backfill</i> | | | | | | | | | | | | | |
| | Backfill, dozer backfilling, trench, no compaction, inlet | 11000 | Cuyd | \$0.80 | \$8,800.00 | \$0.00 | \$0.00 | \$1.28 | \$14,080.00 | \$2.08 / Cuyd | \$0.00 | \$0.00 | \$22,880.00 |
| <i>02340 - Bedding</i> | | | | | | | | | | | | | |
| | Bedding, crushed stone 3/4" to 1/2", inlet | 1467 | Cuyd | \$8.47 | \$12,425.49 | \$32.03 | \$46,988.01 | \$1.89 | \$2,772.63 | \$42.39 / Cuyd | \$0.00 | \$0.00 | \$62,186.13 |
| <i>02360 - Compaction</i> | | | | | | | | | | | | | |
| | Compaction, trench, walk behind, vib. plate, bedding | 11000 | Cuyd | \$1.90 | \$20,900.00 | \$0.00 | \$0.00 | \$0.51 | \$5,610.00 | \$2.41 / Cuyd | \$0.00 | \$0.00 | \$26,510.00 |
| | Compaction, trench, walk behind, vib. plate, subgrade | 667 | Cuyd | \$1.90 | \$1,266.73 | \$0.00 | \$0.00 | \$0.51 | \$340.02 | \$2.41 / Cuyd | \$0.00 | \$0.00 | \$1,606.75 |
| | Compaction, trench, walk behind, vib.. Plate | 11000 | Cuyd | \$1.90 | \$20,900.00 | \$0.00 | \$0.00 | \$0.51 | \$5,610.00 | \$2.41 / Cuyd | \$0.00 | \$0.00 | \$26,510.00 |
| <i>02450 - Excavating, trench</i> | | | | | | | | | | | | | |
| | Excavate trench, no sht or dewtrg, 4'-6' D, 1-1/2 CY hyd bac | 17600 | Cuyd | \$1.95 | \$34,320.00 | \$0.00 | \$0.00 | \$1.42 | \$24,992.00 | \$3.37 / Cuyd | \$0.00 | \$0.00 | \$59,312.00 |
| <i>02480 - Rip-rap</i> | | | | | | | | | | | | | |
| | Rip-rap, gabions, galv steel mesh boxes, stone filled | 104 | Cuyd | \$49.95 | \$5,194.80 | \$60.56 | \$6,298.24 | \$16.44 | \$1,709.76 | \$126.95 / Cuyd | \$0.00 | \$0.00 | \$13,202.80 |
| <i>02610 - Asphalt concrete pavement</i> | | | | | | | | | | | | | |
| | Asphaltic conc pavement, pavement replacement over trench, 6" | 204 | Sqyd | \$44.54 | \$9,073.24 | \$27.00 | \$5,500.17 | \$3.79 | \$772.06 | \$75.33 / Sqyd | \$0.00 | \$0.00 | \$15,345.47 |
| | SITE CONSTRUCTION Total | | | | \$113,957.89 | | \$58,786.42 | | \$56,597.42 | | \$0.00 | \$0.00 | \$229,341.73 |
| 03 - CONCRETE | | | | | | | | | | | | | |
| <i>03150 - Concrete, ready mix</i> | | | | | | | | | | | | | |
| | Headwall, with apron | 5 | Cuyd | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$1000 / Cuyd | \$0.00 | \$5,000.00 | \$5,000.00 |
| | CONCRETE Total | | | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | \$5,000.00 | \$5,000.00 |
| 15 - MECHANICAL | | | | | | | | | | | | | |
| <i>15090 - Pipe, drng&sewage, concrete</i> | | | | | | | | | | | | | |
| | Piping, drainage & sewage, RCP, class 3, no gaskets, 84" dia | 3600 | Lnft | \$125.05 | \$450,180.00 | \$300.00 | \$1,080,000.00 | \$12.40 | \$44,640.00 | \$437.45 / Lnft | \$0.00 | \$0.00 | \$1,574,820.00 |
| | Piping, water dist, conc pipe, gasket, 84" dia | 360 | Each | \$3.14 | \$1,130.40 | \$36.00 | \$12,960.00 | \$0.00 | \$0.00 | \$39.14 / Each | \$0.00 | \$0.00 | \$14,090.40 |
| <i>15395 - Cleanouts</i> | | | | | | | | | | | | | |
| | Cleanouts, flr type, rnd top, xtra hvy dty, 84" pipe size | 9 | Each | \$2,217.00 | \$19,953.00 | \$3,659.00 | \$32,931.00 | \$0.00 | \$0.00 | \$5876 / Each | \$0.00 | \$0.00 | \$52,884.00 |
| | MECHANICAL Total | | | | \$471,263.40 | | \$1,125,891.00 | | \$44,640.00 | | \$0.00 | \$0.00 | \$1,641,794.40 |
| | Project BNB Total | | | | \$585,221.29 | | \$1,184,677.42 | | \$101,237.42 | | \$0.00 | \$5,000.00 | \$1,876,136.13 |
| | Grand Total | | | | \$585,221.29 | | \$1,184,677.42 | | \$101,237.42 | | \$0.00 | \$5,000.00 | \$1,876,136.13 |

| Category | Percent | Amount |
|-------------------------------------|---------|--------------------|
| Labor | 49.66% | \$585,221 |
| Material | 100.53% | \$1,184,677 |
| Equipment | 8.59% | \$101,237 |
| Subcontractor | 0.00% | \$0 |
| Other | 0.42% | \$5,000 |
| Net Costs | | \$1,876,136 |
| Labor Mark-up | 18.00% | \$105,340 |
| Material Mark-up | 15.00% | \$177,702 |
| Subcontractor Mark-up | 5.00% | \$0 |
| Equipment Mark-up | 15.00% | \$15,186 |
| Sales tax (material) | 7.75% | \$91,813 |
| Sales tax (equipment) | 7.75% | \$7,846 |
| Material Shipping & Handling | 2.50% | \$29,617 |
| Worker's Travel/Subsistence | 0.10% | \$585 |
| Subtotal | | \$2,304,224 |
| Contractor General Conditions | 12.00% | \$276,507 |
| Subtotal | | \$2,580,731 |
| Earthquake Insurance | 0.10% | \$2,581 |
| Subtotal | | \$2,583,311 |
| Construction Contingency | 20.00% | \$516,662 |
| Subtotal | | \$3,099,974 |
| Bldg Risk, Liability Auto Ins. | 2.00% | \$61,999 |
| Subtotal | | \$3,161,973 |
| Performance Bond | 1.00% | \$31,620 |
| Payment Bond | 1.00% | \$31,620 |
| Subtotal | | \$3,225,213 |
| Engineering Fee | 10.00% | \$187,614 |
| Environmental Permitting (Lump Sum) | - | \$10,000 |
| Total Estimate | | \$3,422,826 |



City of Carlsbad, Master Drainage Plan

| | |
|--------------------------------|------------------|
| Project Number:: | 128290 |
| Client:: | City of Carlsbad |
| Estimator(s):: | SB / DG |
| Estimating Office:: | Walnut Creek |
| Estimate Issue Number:: | 01 |
| Estimate Original Issue Date:: | 3/14/2006 |
| Estimate Revision Number:: | 04 |
| Estimate Revision Date:: | 6/27/2008 |
| BC Project Manager:: | Chris Herencia |
| Estimate QA/QC Reviewer:: | Butch Matthews |
| Estimate QA/QC Date:: | 6/27/2008 |

PROJECT LOCATION / PROCESS AREA

Project BP - Located in Basin B

| Item | Item Description | Quantity | Unit | Labor \$/Unit | Labor Amount | Materials \$/Unit | Materials Amount | Equip \$/Unit | Equip Amount | Total \$/Unit | Subs Amount | Other Amount | Grand Total |
|---|--|----------|------|---------------|---------------|-------------------|------------------|---------------|-------------------|-----------------|---------------|---------------|-------------------|
| Project BP | | | | | | | | | | | | | |
| 01 - GENERAL REQUIREMENTS | | | | | | | | | | | | | |
| 01200 - General equipment rental | | | | | | | | | | | | | |
| | Trench box, 9500 lbs, 8'x 20' | 4 | Day | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$240.00 | \$960.00 | \$240 / Day | \$0.00 | \$0.00 | \$960.00 |
| | Trench Plates allowance | 1 | Mo | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$900.00 | \$900.00 | \$900 / Mo | \$0.00 | \$0.00 | \$900.00 |
| | GENERAL REQUIREMENTS Total | | | | \$0.00 | | \$0.00 | | \$1,860.00 | | \$0.00 | \$0.00 | \$1,860.00 |
| 02 SITE CONSTRUCTION | | | | | | | | | | | | | |
| 02060 - Site demolition | | | | | | | | | | | | | |
| | Site dml, no hauling, pavement removal, bit, 4" to 6" thick | 15 | Sqyd | \$5.29 | \$79.35 | \$0.00 | \$0.00 | \$3.49 | \$52.35 | \$8.78 / Sqyd | \$0.00 | \$0.00 | \$131.70 |
| | Asphalt disposal - hauling and disposal fee, 4" thick | 15 | Sqyd | \$1.00 | \$15.00 | \$4.70 | \$70.50 | \$1.32 | \$19.80 | \$7.02 / Sqyd | \$0.00 | \$0.00 | \$105.30 |
| 02170 - Saw cutting | | | | | | | | | | | | | |
| | Saw cutting, asphalt, up to 3" deep | 150 | Lnft | \$0.48 | \$72.00 | \$0.07 | \$10.50 | \$0.26 | \$39.00 | \$0.81 / Lnft | \$0.00 | \$0.00 | \$121.50 |
| | Saw cutting, asphalt, after 3" deep; each addl inch of depth | 150 | Lnft | \$0.82 | \$123.00 | \$0.30 | \$45.00 | \$0.44 | \$66.00 | \$1.56 / Lnft | \$0.00 | \$0.00 | \$234.00 |
| 02310 - Fine grade | | | | | | | | | | | | | |
| | Fine grade under asphalt | 15 | Sqyd | \$0.26 | \$3.90 | \$0.00 | \$0.00 | \$0.21 | \$3.15 | \$0.47 / Sqyd | \$0.00 | \$0.00 | \$7.05 |
| 02320 - Backfill | | | | | | | | | | | | | |
| | Backfill, dozer backfilling, trench, up to 300' haul, no compaction, | 250 | Cuyd | \$0.80 | \$200.00 | \$0.00 | \$0.00 | \$1.28 | \$320.00 | \$2.08 / Cuyd | \$0.00 | \$0.00 | \$520.00 |
| 02340 - Bedding | | | | | | | | | | | | | |
| | Bedding, crushed stone 3/4" to 1/2", outlet | 30 | Cuyd | \$8.47 | \$254.10 | \$32.03 | \$960.90 | \$1.89 | \$56.70 | \$42.39 / Cuyd | \$0.00 | \$0.00 | \$1,271.70 |
| 02360 - Compaction | | | | | | | | | | | | | |
| | Compaction, trench, walk behind, vib. plate, subgrade outlet | 250 | Cuyd | \$1.90 | \$475.00 | \$0.00 | \$0.00 | \$0.51 | \$127.50 | \$2.41 / Cuyd | \$0.00 | \$0.00 | \$602.50 |
| 02450 - Excavating, trench | | | | | | | | | | | | | |
| | Excavate trench, no sht or dewtrg, 4'-6' D, 1-1/2 CY hyd bac, outlet | 250 | Cuyd | \$1.95 | \$487.50 | \$0.00 | \$0.00 | \$1.42 | \$355.00 | \$3.37 / Cuyd | \$0.00 | \$0.00 | \$842.50 |
| 02460 - Hauling | | | | | | | | | | | | | |
| | Disposal fee | 5 | Trk | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$105 / Trk | \$0.00 | \$525.00 | \$525.00 |
| | Hauling, LCY, no loading, 12 CY dump truck, stockpile on site | 100 | Cuyd | \$4.66 | \$466.00 | \$0.00 | \$0.00 | \$9.74 | \$974.00 | \$14.4 / Cuyd | \$0.00 | \$0.00 | \$1,440.00 |
| | Hauling, LCY, no loading, 12 CY dump truck, clear & grub | 100 | Cuyd | \$4.66 | \$466.00 | \$0.00 | \$0.00 | \$9.74 | \$974.00 | \$14.4 / Cuyd | \$0.00 | \$0.00 | \$1,440.00 |
| | Hauling, LCY, no loading, 12 c.y. dump truck, 20 MI RT, 0.4 lds/hr | 100 | Cuyd | \$7.18 | \$718.00 | \$3.00 | \$300.00 | \$15.45 | \$1,544.64 | \$25.63 / Cuyd | \$0.00 | \$0.00 | \$2,562.64 |
| | Loading Trucks, F.E. Loader, 3 C.Y., stockpile | 100 | Cuyd | \$0.74 | \$74.00 | \$0.00 | \$0.00 | \$1.24 | \$124.00 | \$1.98 / Cuyd | \$0.00 | \$0.00 | \$198.00 |
| | Loading Trucks, F.E. Loader, 3 C.Y., | 100 | Cuyd | \$0.74 | \$74.00 | \$0.00 | \$0.00 | \$1.24 | \$124.00 | \$1.98 / Cuyd | \$0.00 | \$0.00 | \$198.00 |
| | Loading Trucks, F.E. Loader, 3 C.Y., clear & grub | 100 | Cuyd | \$0.74 | \$74.00 | \$0.00 | \$0.00 | \$1.24 | \$124.00 | \$1.98 / Cuyd | \$0.00 | \$0.00 | \$198.00 |
| 02470 - Soil stabilization | | | | | | | | | | | | | |
| | Soil stabilization, geotextile fabric, woven, H.D., 600 lb. tensile st | 400 | Sqyd | \$0.32 | \$128.00 | \$1.85 | \$740.00 | \$0.00 | \$0.00 | \$2.17 / Sqyd | \$0.00 | \$0.00 | \$868.00 |
| 02480 - Rip-rap | | | | | | | | | | | | | |
| | Rip-rap, gabions, galv steel mesh boxes, stone filled, 36" deep | 100 | Cuyd | \$49.95 | \$4,995.00 | \$60.56 | \$6,056.00 | \$16.44 | \$1,644.00 | \$126.95 / Cuyd | \$0.00 | \$0.00 | \$12,695.00 |
| 02490 - Erosion control | | | | | | | | | | | | | |
| | Erosion control allowance: | 1 | Lsum | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$2614 / Lsum | \$0.00 | \$2,614.00 | \$2,614.00 |
| 02600 - Base course | | | | | | | | | | | | | |
| | Base course, large areas, crushed 3/4" stone, compacted to 12" | 400 | Sqyd | \$0.87 | \$348.00 | \$10.76 | \$4,304.00 | \$1.11 | \$444.00 | \$12.74 / Sqyd | \$0.00 | \$0.00 | \$5,096.00 |

| Item | Item Description | Quantity | Unit | Labor \$/Unit | Labor Amount | Materials \$/Unit | Materials Amount | Equip \$/Unit | Equip Amount | Total \$/Unit | Subs Amount | Other Amount | Grand Total |
|--|---|----------|------|---------------|-------------------|-------------------|--------------------|---------------|-------------------|----------------|---------------|---------------------|---------------------|
| <i>02610 - Asphalt concrete pavement</i> | | | | | | | | | | | | | |
| | Asphaltic conc pavement, pavement replacement over trench, 4" thick | 15 | Sqyd | \$35.00 | \$525.00 | \$18.00 | \$270.00 | \$2.98 | \$44.70 | \$55.98 / Sqyd | \$0.00 | \$0.00 | \$839.70 |
| | <i>SITE CONSTRUCTION Total</i> | | | | <i>\$9,577.85</i> | | <i>\$12,756.90</i> | | <i>\$7,036.84</i> | | <i>\$0.00</i> | <i>\$3,139.00</i> | <i>\$32,510.59</i> |
| <i>03 - CONCRETE</i> | | | | | | | | | | | | | |
| <i>03150 - Concrete, ready mix</i> | | | | | | | | | | | | | |
| | Headwall, inlet | 10 | Cuyd | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$1000 / Cuyd | \$0.00 | \$10,000.00 | \$10,000.00 |
| | 6'x7' RCB Culvert | 108 | Cuyd | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$1000 / Cuyd | \$0.00 | \$108,000.00 | \$108,000.00 |
| | 4.3'x5.7' RCB Culvert | 27 | Cuyd | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$1000 / Cuyd | \$0.00 | \$27,000.00 | \$27,000.00 |
| | Culvert, outlet | 12 | Cuyd | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$1000 / Cuyd | \$0.00 | \$12,000.00 | \$12,000.00 |
| | <i>CONCRETE Total</i> | | | | <i>\$0.00</i> | | <i>\$0.00</i> | | <i>\$0.00</i> | | <i>\$0.00</i> | <i>\$157,000.00</i> | <i>\$157,000.00</i> |
| | <i>Project BP Total</i> | | | | <i>\$9,577.85</i> | | <i>\$12,756.90</i> | | <i>\$8,896.84</i> | | | <i>\$160,139.00</i> | <i>\$191,370.59</i> |
| | Grand Total | | | | \$9,577.85 | | \$12,756.90 | | \$8,896.84 | | \$0.00 | \$160,139.00 | \$191,370.59 |

| Category | Percent | Amount |
|-------------------------------------|---------|------------------|
| Labor | 0.81% | \$9,578 |
| Material | 1.08% | \$12,757 |
| Equipment | 0.75% | \$8,897 |
| Subcontractor | 0.00% | \$0 |
| Other | 13.59% | \$160,139 |
| Net Costs | | \$191,371 |
| Labor Mark-up | 18.00% | \$1,724 |
| Material Mark-up | 15.00% | \$1,914 |
| Subcontractor Mark-up | 5.00% | \$0 |
| Equipment Mark-up | 15.00% | \$1,335 |
| Sales tax (material) | 7.75% | \$989 |
| Sales tax (equipment) | 7.75% | \$690 |
| Material Shipping & Handling | 2.50% | \$319 |
| Worker's Travel/Subsistence | 0.10% | \$10 |
| Subtotal | | \$198,349 |
| Contractor General Conditions | 12.00% | \$23,802 |
| Subtotal | | \$222,151 |
| Earthquake Insurance | 0.10% | \$222 |
| Subtotal | | \$222,373 |
| Construction Contingency | 25.00% | \$55,593 |
| Subtotal | | \$277,967 |
| Bldg Risk, Liability Auto Ins. | 2.00% | \$5,559 |
| Subtotal | | \$283,526 |
| Performance Bond | 1.00% | \$2,835 |
| Payment Bond | 1.00% | \$2,835 |
| Subtotal | | \$289,197 |
| Engineering Fee | 10.00% | \$19,137 |
| Environmental Permitting (Lump Sum) | - | \$17,000 |
| Total Estimate | | \$325,334 |



City of Carlsbad, Drainage Master Plan

| | |
|--------------------------------|------------------|
| Project Number:: | 128290 |
| Client:: | City of Carlsbad |
| Estimator(s):: | SB / DG |
| Estimating Office:: | Walnut Creek |
| Estimate Issue Number:: | 01 |
| Estimate Original Issue Date:: | 11/14/2005 |
| Estimate Revision Number:: | 04 |
| Estimate Revision Date:: | 6/27/2008 |
| BC Project Manager:: | Chris Herencia |
| Estimate QA/QC Reviewer:: | Butch Matthews |
| Estimate QA/QC Date:: | 6/27/2008 |

PROJECT LOCATION / PROCESS AREA

Project BQ - Located in Basin B

| Item | Item Description | Quantity | Unit | Labor \$/Unit | Labor Amount | Materials \$/Unit | Materials Amount | Equip \$/Unit | Equip Amount | Total \$/Unit | Subs Amount | Other Amount | Grand Total |
|---------------------------------------|--|----------|------|---------------|--------------------|-------------------|--------------------|---------------|--------------------|-----------------|---------------|-------------------|--------------------|
| Project BQ | | | | | | | | | | | | | |
| 02 - SITE CONSTRUCTION | | | | | | | | | | | | | |
| 02210 - Clear and grub | | | | | | | | | | | | | |
| | Clear & grub, brush, including stumps | 0.29 | Acre | \$1,759.00 | \$510.11 | \$0.00 | \$0.00 | \$3,686.00 | \$1,068.94 | \$5445 / Acre | \$0.00 | \$0.00 | \$1,579.05 |
| 02310 - Fine grade | | | | | | | | | | | | | |
| | Fine grade, grade subgrade for base course, roadways | 1067 | Sqyd | \$0.26 | \$277.42 | \$0.00 | \$0.00 | \$0.21 | \$224.07 | \$0.47 / Sqyd | \$0.00 | \$0.00 | \$501.49 |
| 02330 - Backfill, structural | | | | | | | | | | | | | |
| | Backfill, from stockpile | 140 | Cuyd | \$0.60 | \$84.00 | \$0.00 | \$0.00 | \$0.40 | \$56.00 | \$1 / Cuyd | \$0.00 | \$0.00 | \$140.00 |
| 02360 - Compaction | | | | | | | | | | | | | |
| | Compaction, walk behind, vibrating pl 18" wide, 12" lifts, 4 passes | 3465 | Cuyd | \$1.90 | \$6,583.50 | \$0.00 | \$0.00 | \$0.51 | \$1,767.15 | \$2.41 / Cuyd | \$0.00 | \$0.00 | \$8,350.65 |
| | Compaction, walk behind, vibrating pl 18" w, 12" lifts, 4 passes, | 119 | Cuyd | \$1.90 | \$226.10 | \$0.00 | \$0.00 | \$0.51 | \$60.69 | \$2.41 / Cuyd | \$0.00 | \$0.00 | \$286.79 |
| 02420 - Excavating, structural | | | | | | | | | | | | | |
| | Excavating, structural, mach excav, com earth, hyd backhoe, 2 CY | 550 | Cuyd | \$5.28 | \$2,904.00 | \$0.00 | \$0.00 | \$6.70 | \$3,685.00 | \$11.98 / Cuyd | \$0.00 | \$0.00 | \$6,589.00 |
| 02460 - Hauling | | | | | | | | | | | | | |
| | Disposal fee | 20 | Trk | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$105 / Trk | \$0.00 | \$2,100.00 | \$2,100.00 |
| | Hauling, LCY, no loading, 12 CY dump truck, stockpile on site | 140 | Cuyd | \$4.66 | \$652.40 | \$0.00 | \$0.00 | \$9.74 | \$1,363.60 | \$14.4 / Cuyd | \$0.00 | \$0.00 | \$2,016.00 |
| | Hauling, LCY, no loading, 12 CY dump truck, clear & grub | 237 | Cuyd | \$4.66 | \$1,104.42 | \$0.00 | \$0.00 | \$9.74 | \$2,308.38 | \$14.4 / Cuyd | \$0.00 | \$0.00 | \$3,412.80 |
| | Hauling, LCY, no loading, 12 c.y. dump truck, 20 MI RT, 0.4 lds/hr | 616 | Cuyd | \$7.18 | \$4,422.88 | \$3.00 | \$1,848.00 | \$15.45 | \$9,515.00 | \$25.63 / Cuyd | \$0.00 | \$0.00 | \$15,785.88 |
| | Loading Trucks, F.E. Loader, 3 C.Y., stockpile | 140 | Cuyd | \$0.74 | \$103.60 | \$0.00 | \$0.00 | \$1.24 | \$173.60 | \$1.98 / Cuyd | \$0.00 | \$0.00 | \$277.20 |
| | Loading Trucks, F.E. Loader, 3 C.Y.. | 616 | Cuyd | \$0.74 | \$455.84 | \$0.00 | \$0.00 | \$1.24 | \$763.84 | \$1.98 / Cuyd | \$0.00 | \$0.00 | \$1,219.68 |
| | Loading Trucks, F.E. Loader, 3 C.Y., clear & grub | 237 | Cuyd | \$0.74 | \$175.38 | \$0.00 | \$0.00 | \$1.24 | \$293.88 | \$1.98 / Cuyd | \$0.00 | \$0.00 | \$469.26 |
| 02470 - Soil stabilization | | | | | | | | | | | | | |
| | Soil stabilization, geotextile fabric, woven, H.D., 600 lb. tensile st | 290 | Sqyd | \$0.32 | \$92.80 | \$1.85 | \$536.50 | \$0.00 | \$0.00 | \$2.17 / Sqyd | \$0.00 | \$0.00 | \$629.30 |
| 02480 - Rip-rap | | | | | | | | | | | | | |
| | Rip-rap, gabions, galv steel mesh boxes, stone filled, 36" deep | 100 | Cuyd | \$49.95 | \$4,995.00 | \$60.56 | \$6,056.00 | \$16.44 | \$1,644.00 | \$126.95 / Cuyd | \$0.00 | \$0.00 | \$12,695.00 |
| 02490 - Erosion control | | | | | | | | | | | | | |
| | Erosion control allowance: | 1 | Lsum | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$2614 / Lsum | \$0.00 | \$2,614.00 | \$2,614.00 |
| 02600 - Base course | | | | | | | | | | | | | |
| | Base course, large areas, crushed 3/4" stone, compacted to 12" | 667 | Sqyd | \$0.87 | \$580.29 | \$10.76 | \$7,176.92 | \$1.11 | \$740.37 | \$12.74 / Sqyd | \$0.00 | \$0.00 | \$8,497.58 |
| SITE CONSTRUCTION Total | | | | | \$23,167.74 | | \$15,617.42 | | \$23,664.52 | | \$0.00 | \$4,714.00 | \$67,163.68 |
| Project BQ Total | | | | | \$23,167.74 | | \$15,617.42 | | \$23,664.52 | | \$0.00 | \$4,714.00 | \$67,163.68 |
| Grand Total | | | | | \$23,167.74 | | \$15,617.42 | | \$23,664.52 | | \$0.00 | \$4,714.00 | \$67,163.68 |

| Category | Percent | Amount |
|-------------------------------------|---------|------------------|
| Labor | 1.97% | \$23,168 |
| Material | 1.33% | \$15,617 |
| Equipment | 2.01% | \$23,665 |
| Subcontractor | 0.00% | \$0 |
| Other | 0.40% | \$4,714 |
| Net Costs | | \$67,164 |
| Labor Mark-up | 18.00% | \$4,170 |
| Material Mark-up | 15.00% | \$2,343 |
| Subcontractor Mark-up | 5.00% | \$0 |
| Equipment Mark-up | 15.00% | \$3,550 |
| Sales tax (material) | 7.75% | \$1,210 |
| Sales tax (equipment) | 7.75% | \$1,834 |
| Material Shipping & Handling | 2.50% | \$390 |
| Worker's Travel/Subsistence | 0.10% | \$23 |
| Subtotal | | \$80,684 |
| Contractor General Conditions | 12.00% | \$9,682 |
| Subtotal | | \$90,366 |
| Earthquake Insurance | 0.10% | \$90 |
| Subtotal | | \$90,457 |
| Construction Contingency | 25.00% | \$22,614 |
| Subtotal | | \$113,071 |
| Bldg Risk, Liability Auto Ins. | 2.00% | \$2,261 |
| Subtotal | | \$115,332 |
| Performance Bond | 1.00% | \$1,153 |
| Payment Bond | 1.00% | \$1,153 |
| Subtotal | | \$117,639 |
| Engineering Fee | 10.00% | \$6,716 |
| Environmental Permitting (Lump Sum) | - | \$7,000 |
| Total Estimate | | \$131,355 |



City of Carlsbad, Drainage Master Plan

| | |
|--------------------------------|------------------|
| Project Number:: | 128290 |
| Client:: | City of Carlsbad |
| Estimator(s):: | DO / DG |
| Estimating Office:: | Walnut Creek |
| Estimate Issue Number:: | 01 |
| Estimate Original Issue Date:: | 11/5/2007 |
| Estimate Revision Number:: | 04 |
| Estimate Revision Date:: | 6/27/2008 |
| BC Project Manager:: | Chris Herencia |
| Estimate QA/QC Reviewer:: | Butch Matthews |
| Estimate QA/QC Date:: | 6/27/2008 |

PROJECT LOCATION / PROCESS AREA

Project BR - Located in Basin B

| Item | Item Description | Quantity | Unit | Labor \$/Unit | Labor Amount | Materials \$/Unit | Materials Amount | Equip \$/Unit | Equip Amount | Total \$/Unit | Subs Amount | Other Amount | Grand Total |
|---|--|----------|------|---------------|--------------------|-------------------|--------------------|---------------|-------------------|-----------------|---------------|--------------------|--------------------|
| Project BR | | | | | | | | | | | | | |
| 02 - SITE CONSTRUCTION | | | | | | | | | | | | | |
| 02320 - Backfill | | | | | | | | | | | | | |
| | Backfill, dozer backfilling, trench, up to 300' haul, no compaction | 127 | Cuyd | \$0.80 | \$101.60 | \$0.00 | \$0.00 | \$1.28 | \$162.56 | \$2.08 / Cuyd | \$0.00 | \$0.00 | \$264.16 |
| 02340 - Bedding | | | | | | | | | | | | | |
| | Bedding, crushed stone 3/4" to 1/2" | 28 | Cuyd | \$8.47 | \$237.16 | \$32.03 | \$896.84 | \$1.89 | \$52.92 | \$42.39 / Cuyd | \$0.00 | \$0.00 | \$1,186.92 |
| | Backing Material, 200 Lb | 21 | Cuyd | \$17.00 | \$357.00 | \$60.00 | \$1,260.00 | \$20.00 | \$420.00 | \$97 / Cuyd | \$0.00 | \$0.00 | \$2,037.00 |
| 02350 - Borrow, Idng and/or sprng | | | | | | | | | | | | | |
| | Borrow, bank measure, select granular fill, shovel, 1.5 CY bucket. 1/4 | 380 | Cuyd | \$1.25 | \$475.00 | \$13.25 | \$5,035.00 | \$3.20 | \$1,216.00 | \$17.7 / Cuyd | \$0.00 | \$0.00 | \$6,726.00 |
| 02360 - Compaction | | | | | | | | | | | | | |
| | Compaction, vibratory plate, 8" lifts, common fill | 423 | Cuyd | \$1.90 | \$803.70 | \$0.00 | \$0.00 | \$0.51 | \$215.73 | \$2.41 / Cuyd | \$0.00 | \$0.00 | \$1,019.43 |
| | Compaction, vibratory plate, 8" lifts, select fill, bedding | 32 | Cuyd | \$1.90 | \$60.80 | \$0.00 | \$0.00 | \$0.51 | \$16.32 | \$2.41 / Cuyd | \$0.00 | \$0.00 | \$77.12 |
| 02450 - Excavating, trench | | | | | | | | | | | | | |
| | Excavate trench, no sht or dewtrg, 4'-6' D, 1-1/2 CY hyd bac | 106 | Cuyd | \$1.95 | \$206.70 | \$0.00 | \$0.00 | \$1.42 | \$150.52 | \$3.37 / Cuyd | \$0.00 | \$0.00 | \$357.22 |
| 02470 - Soil stabilization | | | | | | | | | | | | | |
| | Soil stabilization, geotextile fabric, woven, H.D., 600 lb. tensile st | 53 | Sqyd | \$0.32 | \$16.96 | \$1.85 | \$98.05 | \$0.00 | \$0.00 | \$2.17 / Sqyd | \$0.00 | \$0.00 | \$115.01 |
| 02480 - Rip-rap | | | | | | | | | | | | | |
| | Rip-rap, machine placed for slope prot, 3/8 to 1/4 CY pieces | 52 | Cuyd | \$37.46 | \$1,947.92 | \$49.55 | \$2,576.60 | \$12.33 | \$641.16 | \$99.34 / Cuyd | \$0.00 | \$0.00 | \$5,165.68 |
| 02610 - Asphaltic concrete pavement | | | | | | | | | | | | | |
| | Asphaltic conc pavement, pavement replacement over trench, 6" | 267 | Sqyd | \$44.54 | \$11,892.18 | \$27.00 | \$7,209.00 | \$3.79 | \$1,011.93 | \$75.33 / Sqyd | \$0.00 | \$0.00 | \$20,113.11 |
| | SITE CONSTRUCTION Total | | | | \$16,099.02 | | \$17,075.49 | | \$3,887.14 | | \$0.00 | \$0.00 | \$37,061.65 |
| 03 - CONCRETE | | | | | | | | | | | | | |
| 03110 - Forms in place, walls | | | | | | | | | | | | | |
| | Concrete Structure (Conceptual) Headwall | 18 | Cuyd | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$1000 / Cuyd | \$0.00 | \$18,000.00 | \$18,000.00 |
| | Concrete Structure (Conceptual) Open Baffle Box | 7 | Cuyd | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$1000 / Cuyd | \$0.00 | \$7,000.00 | \$7,000.00 |
| | CONCRETE Total | | | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | \$25,000.00 | \$25,000.00 |
| 15 - MECHANICAL | | | | | | | | | | | | | |
| 15090 - Pipe, drng&sewage, concret | | | | | | | | | | | | | |
| | Piping, drainage & sewage, RCP, class 3, no gaskets, 66" dia | 150 | Lnft | \$71.46 | \$10,719.00 | \$250.00 | \$37,500.00 | \$7.09 | \$1,063.50 | \$328.55 / Lnft | \$0.00 | \$0.00 | \$49,282.50 |
| | MECHANICAL Total | | | | \$10,719.00 | | \$37,500.00 | | \$1,063.50 | | \$0.00 | \$0.00 | \$49,282.50 |
| | Project BR Total | | | | \$26,128.37 | | \$39,217.18 | | \$7,685.21 | | \$0.00 | \$21,250.00 | \$94,280.76 |
| | Grand Total | | | | \$26,128.37 | | \$39,217.18 | | \$7,685.21 | | \$0.00 | \$21,250.00 | \$94,280.76 |

| Category | Percent | Amount |
|-------------------------------------|---------|------------------|
| Labor | 2.22% | \$26,128 |
| Material | 3.33% | \$39,217 |
| Equipment | 0.65% | \$7,685 |
| Subcontractor | 0.00% | \$0 |
| Other | 1.80% | \$21,250 |
| Net Costs | | \$94,281 |
| Labor Mark-up | 18.00% | \$4,703 |
| Material Mark-up | 15.00% | \$5,883 |
| Subcontractor Mark-up | 5.00% | \$0 |
| Equipment Mark-up | 15.00% | \$1,153 |
| Sales tax (material) | 7.75% | \$3,039 |
| Sales tax (equipment) | 7.75% | \$596 |
| Material Shipping & Handling | 2.50% | \$980 |
| Worker's Travel/Subsistence | 0.10% | \$26 |
| Subtotal | | \$110,661 |
| Contractor General Conditions | 12.00% | \$13,279 |
| Subtotal | | \$123,940 |
| Earthquake Insurance | 0.10% | \$124 |
| Subtotal | | \$124,064 |
| Construction Contingency | 25.00% | \$31,016 |
| Subtotal | | \$155,080 |
| Bldg Risk, Liability Auto Ins. | 2.00% | \$3,102 |
| Subtotal | | \$158,182 |
| Performance Bond | 1.00% | \$1,582 |
| Payment Bond | 1.00% | \$1,582 |
| Subtotal | | \$161,345 |
| Engineering Fee | 10.00% | \$9,428 |
| Environmental Permitting (Lump Sum) | - | \$10,000 |
| Total Estimate | | \$180,773 |



City of Carlsbad, Drainage Master Plan

| | |
|--------------------------------|------------------|
| Project Number:: | 128290 |
| Client:: | City of Carlsbad |
| Estimator(s):: | SB / DG |
| Estimating Office:: | Walnut Creek |
| Estimate Issue Number:: | 01 |
| Estimate Original Issue Date:: | 5/15/2006 |
| Estimate Revision Number:: | 04 |
| Estimate Revision Date:: | 6/27/2008 |
| BC Project Manager:: | Chris Herencia |
| Estimate QA/QC Reviewer:: | Bob Ferguson |
| Estimate QA/QC Date:: | 6/27/2008 |

PROJECT LOCATION / PROCESS AREA

Project C1 - Located in Basin C

| Item | Item Description | Quantity | Unit | Labor \$/Unit | Labor Amount | Materials \$/Unit | Materials Amount | Equip \$/Unit | Equip Amount | Total \$/Unit | Subs Amount | Other Amount | Grand Total |
|--|--|----------|------|---------------|--------------|-------------------|------------------|---------------|--------------|-----------------|-------------|--------------|--------------|
| Project C1 | | | | | | | | | | | | | |
| 01 - GENERAL REQUIREMENTS | | | | | | | | | | | | | |
| 01210 - Lifting and hoisting equi | | | | | | | | | | | | | |
| | Rent crane truck mounted, hydraulic, 55 ton | 45 | Day | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$990.00 | \$44,550.00 | \$41562 / Day | \$40,572.00 | \$0.00 | \$85,122.00 |
| 02 - SITE CONSTRUCTION | | | | | | | | | | | | | |
| 02060 - Site demolition | | | | | | | | | | | | | |
| | Site dml, conc7" to 24" thick, rod reinforced | 93 | Cuyd | \$92.56 | \$8,608.08 | \$0.00 | \$0.00 | \$61.09 | \$5,681.37 | \$153.65 / Cuyd | \$0.00 | \$0.00 | \$14,289.45 |
| | Hauling, LCY, no loading, 20 c.y. dump truck, 30 MI RT, 0.33 lds/hr | 309 | Cuyd | \$5.95 | \$1,838.55 | \$0.00 | \$0.00 | \$10.40 | \$3,213.60 | \$16.35 / Cuyd | \$0.00 | \$0.00 | \$5,052.15 |
| | Loading Trucks, F.E. Loader, 3 C.Y.. | 309 | Cuyd | \$0.74 | \$228.66 | \$0.00 | \$0.00 | \$1.24 | \$383.16 | \$1.98 / Cuyd | \$0.00 | \$0.00 | \$611.82 |
| | Disposal fee | 20 | Trk | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$105 / Trk | \$0.00 | \$2,100.00 | \$2,100.00 |
| 02280 - Sheet piling | | | | | | | | | | | | | |
| | Sheet piling, steel, no wales, 15' excav., drive, extract & salvage | 2,700 | Sqft | \$14.03 | \$37,881.00 | \$11.41 | \$30,807.00 | \$10.60 | \$28,620.00 | \$36.04 / Sqft | \$0.00 | \$0.00 | \$97,308.00 |
| 02320 - Backfill | | | | | | | | | | | | | |
| | Backfill, dozer backfilling, trench, up to 300' haul, no compaction | 186 | Cuyd | \$0.80 | \$148.80 | \$0.00 | \$0.00 | \$1.28 | \$238.08 | \$2.08 / Cuyd | \$0.00 | \$0.00 | \$386.88 |
| 02340 - Bedding | | | | | | | | | | | | | |
| | Bedding, crushed stone 3/4" to 1/2" | 63 | Cuyd | \$8.47 | \$533.61 | \$32.03 | \$2,017.89 | \$1.89 | \$119.07 | \$42.39 / Cuyd | \$0.00 | \$0.00 | \$2,670.57 |
| 02360 - Compaction | | | | | | | | | | | | | |
| | Compaction, walk behind, vibrating plate 18" wide, subgrade | 63 | Cuyd | \$1.90 | \$119.70 | \$0.00 | \$0.00 | \$0.51 | \$32.13 | \$2.41 / Cuyd | \$0.00 | \$0.00 | \$151.83 |
| | Compaction, walk behind, vibrating plate 18" wide, bedding | 63 | Cuyd | \$1.90 | \$119.70 | \$0.00 | \$0.00 | \$0.51 | \$32.13 | \$2.41 / Cuyd | \$0.00 | \$0.00 | \$151.83 |
| | Compaction, walk behind, vibrating plate 18" wide, backfill | 186 | Cuyd | \$1.90 | \$353.40 | \$0.00 | \$0.00 | \$0.51 | \$94.86 | \$2.41 / Cuyd | \$0.00 | \$0.00 | \$448.26 |
| | Compaction, riding, vibrating roller, 6" lifts, fill | 9,827 | Cuyd | \$2.93 | \$28,793.11 | \$0.00 | \$0.00 | \$0.78 | \$7,665.06 | \$3.71 / Cuyd | \$0.00 | \$0.00 | \$36,458.17 |
| 02420 - Excavating, structural | | | | | | | | | | | | | |
| | Excavating, structural, mach excav, com earth, hyd backhoe, 2 CY bkt | 309 | Cuyd | \$5.28 | \$1,631.52 | \$0.00 | \$0.00 | \$6.70 | \$2,070.30 | \$11.98 / Cuyd | \$0.00 | \$0.00 | \$3,701.82 |
| 02430 - Fill | | | | | | | | | | | | | |
| | Fill, spread dumped material, by dozer, no compaction | 9,827 | Cuyd | \$0.72 | \$7,075.44 | \$0.00 | \$0.00 | \$1.15 | \$11,301.05 | \$1.87 / Cuyd | \$0.00 | \$0.00 | \$18,376.49 |
| | Fill, spread dumped material, by dozer, no compaction, berm | 74 | Cuyd | \$0.72 | \$53.28 | \$0.00 | \$0.00 | \$1.15 | \$85.10 | \$1.87 / Cuyd | \$0.00 | \$0.00 | \$138.38 |
| | Granular fill | 9,827 | Cuyd | \$0.00 | \$0.00 | \$10.06 | \$98,859.62 | \$0.00 | \$0.00 | \$10.06 / Cuyd | \$0.00 | \$0.00 | \$98,859.62 |
| | Granular fill, berm | 74 | Cuyd | \$0.00 | \$0.00 | \$17.04 | \$1,260.96 | \$0.00 | \$0.00 | \$17.04 / Cuyd | \$0.00 | \$0.00 | \$1,260.96 |
| 02460 - Hauling | | | | | | | | | | | | | |
| | Hauling, LCY, no loading, 20 c.y. dump truck, 30 MI RT, 0.33 lds/hr | 309 | Cuyd | \$5.95 | \$1,838.55 | \$0.00 | \$0.00 | \$10.40 | \$3,213.60 | \$16.35 / Cuyd | \$0.00 | \$0.00 | \$5,052.15 |
| | Loading Trucks, F.E. Loader, 3 C.Y.. | 309 | Cuyd | \$0.74 | \$228.66 | \$0.00 | \$0.00 | \$1.24 | \$383.16 | \$1.98 / Cuyd | \$0.00 | \$0.00 | \$611.82 |
| | Disposal fee | 20 | Trk | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$105 / Trk | \$0.00 | \$2,100.00 | \$2,100.00 |
| | Hauling, LCY, no loading, 20 c.y dump truck, 30 MI RT, 0.33 lds/hr, concrete | 93 | Cuyd | \$5.68 | \$528.24 | \$0.00 | \$0.00 | \$9.92 | \$923.00 | \$15.6 / Cuyd | \$0.00 | \$0.00 | \$1,451.24 |
| | Loading Trucks, F.E. Loader, 3 C.Y., concrete | 93 | Cuyd | \$0.74 | \$68.82 | \$0.00 | \$0.00 | \$1.24 | \$115.32 | \$1.98 / Cuyd | \$0.00 | \$0.00 | \$184.14 |
| 02480 - Rip-rap | | | | | | | | | | | | | |
| | Rip-rap, mach placed for slp protec, 18" min thick. not grouted | 1,334 | Sqyd | \$56.55 | \$75,437.70 | \$49.55 | \$66,099.70 | \$12.33 | \$16,448.22 | \$118.43 / Sqyd | \$0.00 | \$0.00 | \$157,985.62 |
| 02600 - Base course | | | | | | | | | | | | | |
| | Base course, large areas, crushed 3/4" stone, compacted to 6" deep | 378 | Sqyd | \$0.73 | \$275.94 | \$5.41 | \$2,044.98 | \$0.94 | \$355.32 | \$7.08 / Sqyd | \$0.00 | \$0.00 | \$2,676.24 |
| 02640 - Lines on pav't | | | | | | | | | | | | | |
| | Painting lines, thermoplastic, white or yellow, 6" wide | 204 | Lnft | \$0.14 | \$28.56 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.14 / Lnft | \$0.00 | \$0.00 | \$28.56 |

| Item | Item Description | Quantity | Unit | Labor \$/Unit | Labor Amount | Materials \$/Unit | Materials Amount | Equip \$/Unit | Equip Amount | Total \$/Unit | Subs Amount | Other Amount | Grand Total |
|--|--|----------|------|---------------|---------------------|-------------------|---------------------|---------------|---------------------|-----------------|--------------------|-----------------------|-----------------------|
| <i>02660 - Sidewlks, drivwys, & patios</i> | | | | | | | | | | | | | |
| | Sidewalks, conc, 3000 PSI, CIP w/ 6x6 mesh, broom fin, no basem 4" T | 544 | Sqft | \$2.01 | \$1,093.44 | \$1.45 | \$788.80 | \$0.00 | \$0.00 | \$3.46 / Sqft | \$0.00 | \$0.00 | \$1,882.24 |
| | Sidewalks, conc, 3000 PSI, for bank run gravel base, 4" thick, add | 544 | Sqft | \$0.47 | \$255.68 | \$0.42 | \$228.48 | \$0.04 | \$21.76 | \$0.93 / Sqft | \$0.00 | \$0.00 | \$505.92 |
| <i>02840 - Landscaping</i> | | | | | | | | | | | | | |
| | Erosion Control Allowance::: | 1 | Lsum | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$30000 / Lsum | \$0.00 | \$30,000.00 | \$30,000.00 |
| | Landscaping Allowance::: | 1 | Lsum | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$30000 / Lsum | \$0.00 | \$30,000.00 | \$30,000.00 |
| | Traffic Control Allowance | 1 | Lsum | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$30000 / Lsum | \$0.00 | \$30,000.00 | \$30,000.00 |
| | SITE CONSTRUCTION Total | | | | \$167,140.44 | | \$202,107.43 | | \$125,546.29 | | \$40,572.00 | \$94,200.00 | \$629,566.16 |
| <i>03 - CONCRETE</i> | | | | | | | | | | | | | |
| <i>03150 - Concrete, ready mix</i> | | | | | | | | | | | | | |
| | 5-12'x12' RCB Culverts | 403 | Cuyd | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$1000 / Cuyd | \$0.00 | \$403,000.00 | \$403,000.00 |
| | Headwall, inlet | 21 | Cuyd | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$1000 / Cuyd | \$0.00 | \$21,000.00 | \$21,000.00 |
| | Headwall, outlet | 28 | Cuyd | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$1000 / Cuyd | \$0.00 | \$28,000.00 | \$28,000.00 |
| | Wall, bridge | 163 | Cuyd | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$1000 / Cuyd | \$0.00 | \$163,000.00 | \$163,000.00 |
| | Footing | 10 | Cuyd | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$1000 / Cuyd | \$0.00 | \$10,000.00 | \$10,000.00 |
| | Elevated slab | 28 | Cuyd | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$1000 / Cuyd | \$0.00 | \$28,000.00 | \$28,000.00 |
| | Wingwall | 1 | Lsum | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$154850 / Lsum | \$0.00 | \$154,850.00 | \$154,850.00 |
| | Slab on Grade | 28 | Cuyd | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$1000 / Cuyd | \$0.00 | \$28,000.00 | \$28,000.00 |
| | Slab on Grade for roadway | 202 | Cuyd | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$1000 / Cuyd | \$0.00 | \$202,000.00 | \$202,000.00 |
| | CONCRETE Total | | | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | \$1,037,850.00 | \$1,037,850.00 |
| <i>05 - METALS</i> | | | | | | | | | | | | | |
| <i>05080 - Railings, industrial</i> | | | | | | | | | | | | | |
| | Railing, pipe, aluminum, 3 rail, clear anodized | 272 | Lnft | \$15.67 | \$4,262.24 | \$45.95 | \$12,498.40 | \$0.96 | \$261.12 | \$81.58 / Lnft | \$0.00 | \$5,168.00 | \$22,189.76 |
| | METALS Total | | | | \$4,262.24 | | \$12,498.40 | | \$261.12 | | \$0.00 | \$5,168.00 | \$22,189.76 |
| <i>07 - THERMAL/MOIST PROTECTION</i> | | | | | | | | | | | | | |
| <i>07100 - Building paper</i> | | | | | | | | | | | | | |
| 0020 | Building paper, polyethylene vapor barrier, std, .010" thick, berm | 28 | Cuyd | \$10.95 | \$306.60 | \$5.35 | \$149.80 | \$0.00 | \$0.00 | \$16.3 / Cuyd | \$0.00 | \$0.00 | \$456.40 |
| | THERMAL/MOIST PROTECTION Total | | | | \$306.60 | | \$149.80 | | \$0.00 | | \$0.00 | \$0.00 | \$456.40 |
| | Project C1 Total | | | | \$167,140.44 | | \$202,107.43 | | \$125,546.29 | | \$40,572.00 | \$1,132,050.00 | \$1,690,062.32 |
| | Grand Total | | | | \$167,140.44 | | \$202,107.43 | | \$125,546.29 | | \$40,572.00 | \$1,132,050.00 | \$1,667,416.16 |

| Category | Percent | Amount |
|--------------------------------------|---------|--------------------|
| Labor | 10.02% | \$167,140 |
| Material | 12.12% | \$202,107 |
| Equipment | 7.53% | \$125,546 |
| Subcontractor | 2.43% | \$40,572 |
| Other | 67.89% | \$1,132,050 |
| Net Costs | | \$1,667,416 |
| Labor Mark-up | 18.00% | \$30,085 |
| Material Mark-up | 15.00% | \$30,316 |
| Subcontractor Mark-up | 5.00% | \$2,029 |
| Equipment Mark-up | 15.00% | \$18,832 |
| Sales tax (material) | 7.75% | \$15,663 |
| Sales tax (equipment) | 7.75% | \$9,730 |
| Material Shipping & Handling | 2.50% | \$5,053 |
| Worker's Travel/Subsistence | 0.10% | \$167 |
| Subtotal | | \$1,779,291 |
| Contractor General Conditions | 12.00% | \$213,515 |
| Subtotal | | \$1,992,806 |
| Earthquake Insurance | 0.10% | \$1,993 |
| Subtotal | | \$1,994,799 |
| Construction Contingency | 35.00% | \$698,180 |
| Subtotal | | \$2,692,978 |
| Bldg Risk, Liability Auto Ins. | 2.00% | \$53,860 |
| Subtotal | | \$2,746,838 |
| Performance Bond | 1.00% | \$27,468 |
| Payment Bond | 1.00% | \$27,468 |
| Subtotal | | \$2,801,775 |
| Engineering Fee | 10.00% | \$166,742 |
| Environ Permitting/Monitoring (L.S.) | - | \$550,000 |
| Total Estimate | | \$3,518,516 |



City of Carlsbad, Drainage Master Plan

| | |
|--------------------------------|------------------|
| Project Number:: | 128290 |
| Client:: | City of Carlsbad |
| Estimator(s):: | JW / DG |
| Estimating Office:: | Walnut Creek |
| Estimate Issue Number:: | 01 |
| Estimate Original Issue Date:: | 3/14/2006 |
| Estimate Revision Number:: | 04 |
| Estimate Revision Date:: | 6/27/2008 |
| BC Project Manager:: | Chris Herencia |
| Estimate QA/QC Reviewer:: | Butch Matthews |
| Estimate QA/QC Date:: | 6/27/2008 |

PROJECT LOCATION / PROCESS AREA

Project C2 - Located in Basin C

| Item | Item Description | Quantity | Unit | Labor \$/Unit | Labor Amount | Materials \$/Unit | Materials Amount | Equip \$/Unit | Equip Amount | Total \$/Unit | Subs Amount | Other Amount | Grand Total |
|---------------------------------------|--|----------|------|---------------|--------------------|-------------------|--------------------|---------------|--------------------|-----------------|---------------|---------------------|---------------------|
| Project C2 | | | | | | | | | | | | | |
| 02 - SITE CONSTRUCTION | | | | | | | | | | | | | |
| 02060 - Site demolition | | | | | | | | | | | | | |
| | Site dml, conc7" to 24" thick, rod reinforced | 10 | Cuyd | \$92.56 | \$925.60 | \$0.00 | \$0.00 | \$61.09 | \$610.90 | \$153.65 / Cuyd | \$0.00 | \$0.00 | \$1,536.50 |
| | Hauling, LCY, no loading, 20 c.y. dump truck, 30 MI RT, 0.33 lds/hr | 10 | Cuyd | \$5.95 | \$59.50 | \$0.00 | \$0.00 | \$10.40 | \$104.00 | \$16.35 / Cuyd | \$0.00 | \$0.00 | \$163.50 |
| | Loading Trucks, F.E. Loader, 3 C.Y.. | 10 | Cuyd | \$0.74 | \$7.40 | \$0.00 | \$0.00 | \$1.24 | \$12.40 | \$1.98 / Cuyd | \$0.00 | \$0.00 | \$19.80 |
| | Disposal fee | 1 | Trk | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$105 / Trk | \$0.00 | \$105.00 | \$105.00 |
| 02280 - Sheet piling | | | | | | | | | | | | | |
| | Sheet piling, steel, no wales, 15' excav., drive, extract & salvage | 1,500 | Sqft | \$14.03 | \$21,045.00 | \$11.41 | \$17,115.00 | \$10.60 | \$15,900.00 | \$36.04 / Sqft | \$0.00 | \$0.00 | \$54,060.00 |
| 02320 - Backfill | | | | | | | | | | | | | |
| | Backfill, dozer backfilling, trench, up to 300' haul, no compaction | 347 | Cuyd | \$0.80 | \$277.60 | \$0.00 | \$0.00 | \$1.28 | \$444.16 | \$2.08 / Cuyd | \$0.00 | \$0.00 | \$721.76 |
| 02340 - Bedding | | | | | | | | | | | | | |
| | Bedding, crushed stone 3/4" to 1/2" | 52 | Cuyd | \$8.47 | \$440.44 | \$32.03 | \$1,665.56 | \$1.89 | \$98.28 | \$42.39 / Cuyd | \$0.00 | \$0.00 | \$2,204.28 |
| 02360 - Compaction | | | | | | | | | | | | | |
| | Compaction, walk behind, vibrating plate 18" wide, subgrade | 33 | Cuyd | \$1.90 | \$62.70 | \$0.00 | \$0.00 | \$0.51 | \$16.83 | \$2.41 / Cuyd | \$0.00 | \$0.00 | \$79.53 |
| | Compaction, walk behind, vibrating plate 18" wide, bedding | 65 | Cuyd | \$1.90 | \$123.50 | \$0.00 | \$0.00 | \$0.51 | \$33.15 | \$2.41 / Cuyd | \$0.00 | \$0.00 | \$156.65 |
| | Compaction, walk behind, vibrating plate 18" wide, backfill | 347 | Cuyd | \$1.90 | \$659.30 | \$0.00 | \$0.00 | \$0.51 | \$176.97 | \$2.41 / Cuyd | \$0.00 | \$0.00 | \$836.27 |
| 02420 - Excavating, structural | | | | | | | | | | | | | |
| | Excavating, structural, mach excav, com earth, hyd backhoe, 1-1/2 CY b | 640 | Cuyd | \$7.33 | \$4,691.20 | \$0.00 | \$0.00 | \$5.34 | \$3,417.60 | \$12.67 / Cuyd | \$0.00 | \$0.00 | \$8,108.80 |
| 02460 - Hauling | | | | | | | | | | | | | |
| | Hauling, LCY, no loading, 20 c.y. dump truck, 30 MI RT, 0.33 lds/hr | 293 | Cuyd | \$5.95 | \$1,743.35 | \$0.00 | \$0.00 | \$10.40 | \$3,047.20 | \$16.35 / Cuyd | \$0.00 | \$0.00 | \$4,790.55 |
| | Loading Trucks, F.E. Loader, 3 C.Y.. | 293 | Cuyd | \$0.74 | \$216.82 | \$0.00 | \$0.00 | \$1.24 | \$363.32 | \$1.98 / Cuyd | \$0.00 | \$0.00 | \$580.14 |
| | Disposal fee | 15 | Trk | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$105 / Trk | \$0.00 | \$1,575.00 | \$1,575.00 |
| 02840 - Landscaping | | | | | | | | | | | | | |
| | Traffic Control Allowance: 2 flaggers, 15' pipe/hr | 1 | Lsum | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$4878 / Lsum | \$0.00 | \$4,878.00 | \$4,878.00 |
| | SITE CONSTRUCTION Total | | | | \$30,252.41 | | \$18,780.56 | | \$24,224.81 | | \$0.00 | \$6,558.00 | \$79,815.78 |
| 03 - CONCRETE | | | | | | | | | | | | | |
| 03150 - Concrete, ready mix | | | | | | | | | | | | | |
| | 4'x10' RCB Culvert | 170 | Cuyd | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$1000 / Cuyd | \$0.00 | \$170,000.00 | \$170,000.00 |
| | Headwall, inlet | 5 | Cuyd | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$1000 / Cuyd | \$0.00 | \$5,000.00 | \$5,000.00 |
| | Headwall, outlet | 5 | Cuyd | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$1000 / Cuyd | \$0.00 | \$5,000.00 | \$5,000.00 |
| | CONCRETE Total | | | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | \$180,000.00 | \$180,000.00 |
| | Project C2 Total | | | | \$30,252.41 | | \$18,780.56 | | \$24,224.81 | | \$0.00 | \$186,558.00 | \$259,815.78 |
| | Grand Total | | | | \$30,252.41 | | \$18,780.56 | | \$24,224.81 | | \$0.00 | \$186,558.00 | \$259,815.78 |

| Category | Percent | Amount |
|--------------------------------------|---------|------------------|
| Labor | 11.64% | \$30,252 |
| Material | 7.23% | \$18,781 |
| Equipment | 9.32% | \$24,225 |
| Subcontractor | 0.00% | \$0 |
| Other | 71.80% | \$186,558 |
| Net Costs | | \$259,816 |
| Labor Mark-up | 18.00% | \$5,445 |
| Material Mark-up | 15.00% | \$2,817 |
| Subcontractor Mark-up | 5.00% | \$0 |
| Equipment Mark-up | 15.00% | \$3,634 |
| Sales tax (material) | 7.75% | \$1,455 |
| Sales tax (equipment) | 7.75% | \$1,877 |
| Material Shipping & Handling | 2.50% | \$470 |
| Worker's Travel/Subsistence | 0.10% | \$30 |
| Subtotal | | \$275,545 |
| Contractor General Conditions | 12.00% | \$33,065 |
| Subtotal | | \$308,610 |
| Earthquake Insurance | 0.10% | \$309 |
| Subtotal | | \$308,919 |
| Construction Contingency | 25.00% | \$77,230 |
| Subtotal | | \$386,148 |
| Bldg Risk, Liability Auto Ins. | 2.00% | \$7,723 |
| Subtotal | | \$393,871 |
| Performance Bond | 1.00% | \$3,939 |
| Payment Bond | 1.00% | \$3,939 |
| Subtotal | | \$401,749 |
| Engineering Fee | 10.00% | \$25,982 |
| Environ Permitting/Monitoring (L.S.) | - | \$300,000 |
| Total Estimate | | \$727,730 |



City of Carlsbad, Drainage Master Plan

| | |
|--------------------------------|------------------|
| Project Number:: | 128290 |
| Client:: | City of Carlsbad |
| Estimator(s):: | SB / DG |
| Estimating Office:: | Walnut Creek |
| Estimate Issue Number:: | 01 |
| Estimate Original Issue Date:: | 11/14/2005 |
| Estimate Revision Number:: | 04 |
| Estimate Revision Date:: | 6/27/2008 |
| BC Project Manager:: | Chris Herencia |
| Estimate QA/QC Reviewer:: | Butch Matthews |
| Estimate QA/QC Date:: | 6/27/2008 |

PROJECT LOCATION / PROCESS AREA

Project CA - Located in Basin C

| Item | Item Description | Quantity | Unit | Labor \$/Unit | Labor Amount | Materials \$/Unit | Materials Amount | Equip \$/Unit | Equip Amount | Total \$/Unit | Subs Amount | Other Amount | Grand Total |
|--|--|----------|------|---------------|---------------------|-------------------|--------------------|---------------|--------------------|----------------|---------------|---------------|---------------------|
| Project CA | | | | | | | | | | | | | |
| 02 - SITE CONSTRUCTION | | | | | | | | | | | | | |
| 02320 - Backfill | | | | | | | | | | | | | |
| | Backfill, dozer backfilling, trench, up to 300' haul, no compaction | 100 | Cuyd | \$0.80 | \$80.00 | \$0.00 | \$0.00 | \$1.28 | \$128.00 | \$2.08 / Cuyd | \$0.00 | \$0.00 | \$208.00 |
| 02360 - Compaction | | | | | | | | | | | | | |
| | Compaction, walk behind, vibrating plate 18" wide, subgrade | 50 | Cuyd | \$1.90 | \$95.00 | \$0.00 | \$0.00 | \$0.51 | \$25.50 | \$2.41 / Cuyd | \$0.00 | \$0.00 | \$120.50 |
| | Compaction, walk behind, vibrating plate 18" wide, bedding | 377 | Cuyd | \$1.90 | \$716.30 | \$0.00 | \$0.00 | \$0.51 | \$192.27 | \$2.41 / Cuyd | \$0.00 | \$0.00 | \$908.57 |
| 02420 - Excavating, structural | | | | | | | | | | | | | |
| | Excavating, structural, mach excav, com earth, hyd backhoe, 1-1/2 CY b | 377 | Cuyd | \$7.33 | \$2,763.41 | \$0.00 | \$0.00 | \$5.34 | \$2,013.18 | \$12.67 / Cuyd | \$0.00 | \$0.00 | \$4,776.59 |
| 02460 - Hauling | | | | | | | | | | | | | |
| | Hauling, LCY, no loading, 20 c.y. dump truck, 30 MI RT, 0.33 lds/hr | 600 | Cuyd | \$5.95 | \$3,570.00 | \$0.00 | \$0.00 | \$10.40 | \$6,240.00 | \$16.35 / Cuyd | \$0.00 | \$0.00 | \$9,810.00 |
| | Loading Trucks, F.E. Loader, 3 C.Y.. | 600 | Cuyd | \$0.74 | \$444.00 | \$0.00 | \$0.00 | \$1.24 | \$744.00 | \$1.98 / Cuyd | \$0.00 | \$0.00 | \$1,188.00 |
| | SITE CONSTRUCTION Total | | | | \$7,668.71 | | \$0.00 | | \$9,342.95 | | \$0.00 | \$0.00 | \$17,011.66 |
| 03 - CONCRETE | | | | | | | | | | | | | |
| 03090 - Forms place, slab grade | | | | | | | | | | | | | |
| | Forms in place, SOG, edge forms, over 12", wood | 1,800 | Sfca | \$3.99 | \$7,182.00 | \$0.80 | \$1,440.00 | \$0.00 | \$0.00 | \$4.79 / Sfca | \$0.00 | \$0.00 | \$8,622.00 |
| 03110 - Forms in place, walls | | | | | | | | | | | | | |
| | Forms in place, walls, job built plyform, to 8' high, below gr | 8,400 | Sfca | \$7.35 | \$61,740.00 | \$2.59 | \$21,756.00 | \$0.00 | \$0.00 | \$9.94 / Sfca | \$0.00 | \$0.00 | \$83,496.00 |
| 03140 - Welded wire fabric | | | | | | | | | | | | | |
| | Welded wire fabric, 10/10 gage, SOG | 18 | Csf | \$36.61 | \$658.98 | \$29.41 | \$529.38 | \$0.00 | \$0.00 | \$66.02 / Csf | \$0.00 | \$0.00 | \$1,188.36 |
| | Welded wire fabric, 10/10 gage, Walls | 84 | Csf | \$36.61 | \$3,075.24 | \$29.41 | \$2,470.44 | \$0.00 | \$0.00 | \$66.02 / Csf | \$0.00 | \$0.00 | \$5,545.68 |
| 03150 - Concrete, ready mix | | | | | | | | | | | | | |
| | Concrete, ready mix, regular weight, 4000 psi | 300 | Cuyd | \$0.00 | \$0.00 | \$120.00 | \$36,000.00 | \$0.00 | \$0.00 | \$120 / Cuyd | \$0.00 | \$0.00 | \$36,000.00 |
| 03170 - Placing concrete | | | | | | | | | | | | | |
| | Placing conc, incl vib, slab on grade, 6" thick, pumped | 34 | Cuyd | \$17.45 | \$593.30 | \$0.00 | \$0.00 | \$5.56 | \$189.04 | \$23.01 / Cuyd | \$0.00 | \$0.00 | \$782.34 |
| | Placing conc, incl vib, walls, 8" thick, pumped | 160 | Cuyd | \$32.28 | \$5,164.80 | \$0.00 | \$0.00 | \$10.28 | \$1,644.80 | \$42.56 / Cuyd | \$0.00 | \$0.00 | \$6,809.60 |
| 03180 - Finishing floors | | | | | | | | | | | | | |
| | Finishing slabs, break ties, forms & patch voids | 1,800 | Sqft | \$1.17 | \$2,106.00 | \$0.03 | \$54.00 | \$0.00 | \$0.00 | \$1.2 / Sqft | \$0.00 | \$0.00 | \$2,160.00 |
| | Finishing floors, monolithic, machine trowel, for finish floor | 1,800 | Sqft | \$0.68 | \$1,224.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.68 / Sqft | \$0.00 | \$0.00 | \$1,224.00 |
| 03190 - Finishing walls | | | | | | | | | | | | | |
| | Finishing slabs, break ties, forms & patch voids | 8,400 | Sqft | \$1.17 | \$9,828.00 | \$0.03 | \$252.00 | \$0.00 | \$0.00 | \$1.2 / Sqft | \$0.00 | \$0.00 | \$10,080.00 |
| | Finishing walls, carborundum rub, wet rub | 8,400 | Sqft | \$2.13 | \$17,892.00 | \$0.03 | \$252.00 | \$0.00 | \$0.00 | \$2.16 / Sqft | \$0.00 | \$0.00 | \$18,144.00 |
| | MECHANICAL Total | | | | \$109,464.32 | | \$62,753.82 | | \$1,833.84 | | \$0.00 | \$0.00 | \$174,051.98 |
| | Project CA Total | | | | \$117,133.03 | | \$62,753.82 | | \$11,176.79 | | \$0.00 | \$0.00 | \$191,063.64 |
| | Grand Total | | | | \$117,133.03 | | \$62,753.82 | | \$11,176.79 | | \$0.00 | \$0.00 | \$191,063.64 |

| Category | Percent | Amount |
|--------------------------------------|---------|------------------|
| Labor | 61.31% | \$117,133 |
| Material | 32.84% | \$62,754 |
| Equipment | 5.85% | \$11,177 |
| Subcontractor | 0.00% | \$0 |
| Other | 0.00% | \$0 |
| Net Costs | | \$191,064 |
| Labor Mark-up | 18.00% | \$21,084 |
| Material Mark-up | 15.00% | \$9,413 |
| Subcontractor Mark-up | 5.00% | \$0 |
| Equipment Mark-up | 15.00% | \$1,677 |
| Sales tax (material) | 7.75% | \$4,863 |
| Sales tax (equipment) | 7.75% | \$866 |
| Material Shipping & Handling | 2.50% | \$1,569 |
| Worker's Travel/Subsistence | 0.10% | \$117 |
| Subtotal | | \$230,653 |
| Contractor General Conditions | 12.00% | \$27,678 |
| Subtotal | | \$258,331 |
| Earthquake Insurance | 0.10% | \$258 |
| Subtotal | | \$258,589 |
| Construction Contingency | 25.00% | \$64,647 |
| Subtotal | | \$323,237 |
| Bldg Risk, Liability Auto Ins. | 2.00% | \$6,465 |
| Subtotal | | \$329,702 |
| Performance Bond | 1.00% | \$3,297 |
| Payment Bond | 1.00% | \$3,297 |
| Subtotal | | \$336,296 |
| Engineering Fee | 10.00% | \$19,106 |
| Environ Permitting/Monitoring (L.S.) | - | \$174,000 |
| Total Estimate | | \$529,402 |



City of Carlsbad, Master Drainage Plan

| | |
|--------------------------------|------------------|
| Project Number:: | 128290 |
| Client:: | City of Carlsbad |
| Estimator(s):: | JW / DG |
| Estimating Office:: | Walnut Creek |
| Estimate Issue Number:: | 01 |
| Estimate Original Issue Date:: | 3/14/2006 |
| Estimate Revision Number:: | 04 |
| Estimate Revision Date:: | 6/27/2008 |
| BC Project Manager:: | Chris Herencia |
| Estimate QA/QC Reviewer:: | Bob Ferguson |
| Estimate QA/QC Date:: | 6/27/2008 |

PROJECT LOCATION / PROCESS AREA

Project DBA

| Item | Item Description | Quantity | Unit | Labor \$/Unit | Labor Amount | Materials \$/Unit | Materials Amount | Equip \$/Unit | Equip Amount | Total \$/Unit | Subs Amount | Other Amount | Grand Total |
|--|---|----------|------|---------------|--------------------|-------------------|--------------------|---------------|-------------------|----------------|---------------|---------------|--------------------|
| Project DBA | | | | | | | | | | | | | |
| 01 - GENERAL REQUIREMENTS | | | | | | | | | | | | | |
| 01200 - General equipment rental | | | | | | | | | | | | | |
| | Trench box, 9500 lbs, 8'x 20' | 1 | Day | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$240.00 | \$240.00 | \$240 / Day | \$0.00 | \$0.00 | \$240.00 |
| | GENERAL REQUIREMENTS Total | | | | \$0.00 | | \$0.00 | | \$240.00 | | \$0.00 | \$0.00 | \$240.00 |
| 02 - SITE CONSTRUCTION | | | | | | | | | | | | | |
| 02020 - Underground marking tape | | | | | | | | | | | | | |
| | Underground tape, detectable aluminum, 2" | 4 | Clf | \$2.34 | \$8.42 | \$3.06 | \$11.02 | \$0.00 | \$0.00 | \$5.4 / Clf | \$0.00 | \$0.00 | \$19.44 |
| 02060 - Site demolition | | | | | | | | | | | | | |
| | Site dml, no hauling, pavement removal, bit, 4" thk | 130 | Sqyd | \$5.29 | \$687.70 | \$0.00 | \$0.00 | \$3.49 | \$453.70 | \$8.78 / Sqyd | \$0.00 | \$0.00 | \$1,141.40 |
| | Asphalt disposal - hauling and disposal fee, 4" thick | 130 | Sqyd | \$1.00 | \$130.00 | \$4.70 | \$611.00 | \$1.32 | \$171.60 | \$7.02 / Sqyd | \$0.00 | \$0.00 | \$912.60 |
| 02170 - Saw cutting | | | | | | | | | | | | | |
| | Saw cutting, asphalt, up to 3" deep | 720 | Lnft | \$0.48 | \$345.60 | \$0.07 | \$50.40 | \$0.26 | \$187.20 | \$0.81 / Lnft | \$0.00 | \$0.00 | \$583.20 |
| | Saw cutting, asphalt, after 3" deep; each addl inch of depth | 720 | Lnft | \$0.82 | \$590.40 | \$0.30 | \$216.00 | \$0.44 | \$316.80 | \$1.56 / Lnft | \$0.00 | \$0.00 | \$1,123.20 |
| 02320 - Backfill | | | | | | | | | | | | | |
| | Backfill, dozer backfilling, trench, up to 300' haul, no compaction | 444 | Cuyd | \$0.80 | \$355.52 | \$0.00 | \$0.00 | \$1.28 | \$568.83 | \$2.08 / Cuyd | \$0.00 | \$0.00 | \$924.35 |
| 02340 - Bedding | | | | | | | | | | | | | |
| | Bedding, crushed stone 3/4" to 1/2" | 265 | Cuyd | \$8.47 | \$2,244.55 | \$32.03 | \$8,487.95 | \$1.89 | \$500.85 | \$42.39 / Cuyd | \$0.00 | \$0.00 | \$11,233.35 |
| 02360 - Compaction | | | | | | | | | | | | | |
| | Compaction, trench, walk behind, vib. plate, bedding | 228 | Cuyd | \$1.90 | \$433.01 | \$0.00 | \$0.00 | \$0.51 | \$116.23 | \$2.41 / Cuyd | \$0.00 | \$0.00 | \$549.24 |
| | Compaction, trench, walk behind, vib. plate, subgrade | 37 | Cuyd | \$1.90 | \$69.73 | \$0.00 | \$0.00 | \$0.51 | \$18.72 | \$2.41 / Cuyd | \$0.00 | \$0.00 | \$88.45 |
| | Compaction, trench, walk behind, vib. plate, backfill | 400 | Cuyd | \$1.90 | \$760.00 | \$0.00 | \$0.00 | \$0.51 | \$204.00 | \$2.41 / Cuyd | \$0.00 | \$0.00 | \$964.00 |
| 02450 - Excavating, trench | | | | | | | | | | | | | |
| | Excavate trench, no sht or dewtrg, 4'-6' D, 1-1/2 CY hyd bac | 693 | Cuyd | \$1.95 | \$1,351.94 | \$0.00 | \$0.00 | \$1.42 | \$984.49 | \$3.37 / Cuyd | \$0.00 | \$0.00 | \$2,336.42 |
| 02460 - Hauling | | | | | | | | | | | | | |
| | Hauling, LCY, no loading, 20 c.y. dump truck, 30 MI RT, 0.33 lds/hr | 422 | Cuyd | \$5.95 | \$2,512.09 | \$0.00 | \$0.00 | \$10.40 | \$4,390.88 | \$16.35 / Cuyd | \$0.00 | \$0.00 | \$6,902.97 |
| | Loading Trucks, F.E. Loader, 3 C.Y.. | 422 | Cuyd | \$0.74 | \$312.43 | \$0.00 | \$0.00 | \$1.24 | \$523.53 | \$1.98 / Cuyd | \$0.00 | \$0.00 | \$835.96 |
| 02570 - Catch basins or manholes | | | | | | | | | | | | | |
| | Junction structure | 2 | Each | \$680.00 | \$1,360.00 | \$6,000.00 | \$12,000.00 | \$0.00 | \$0.00 | \$6680 / Each | \$0.00 | \$0.00 | \$13,360.00 |
| 02600 - Base course | | | | | | | | | | | | | |
| | Base course, large areas, crushed 3/4" stone, compacted to 9" deep | 130 | Sqyd | \$0.80 | \$104.00 | \$8.06 | \$1,047.80 | \$1.02 | \$132.60 | \$9.88 / Sqyd | \$0.00 | \$0.00 | \$1,284.40 |
| 02610 - Asphalt concrete pavement | | | | | | | | | | | | | |
| | Asphaltic conc pavement, pavement replacement over trench, 4" | 130 | Sqyd | \$35.00 | \$4,550.00 | \$18.00 | \$2,340.00 | \$2.98 | \$387.40 | \$55.98 / Sqyd | \$0.00 | \$0.00 | \$7,277.40 |
| 02900 - Pot Holing | | | | | | | | | | | | | |
| | Pot Holing - pipe lines | 4 | Each | \$250.00 | \$1,000.00 | \$0.00 | \$0.00 | \$35.00 | \$140.00 | \$285 / Each | \$0.00 | \$0.00 | \$1,140.00 |
| | SITE CONSTRUCTION Total | | | | \$16,815.39 | | \$24,764.17 | | \$9,096.82 | | \$0.00 | \$0.00 | \$50,676.38 |

| Item | Item Description | Quantity | Unit | Labor \$/Unit | Labor Amount | Materials \$/Unit | Materials Amount | Equip \$/Unit | Equip Amount | Total \$/Unit | Subs Amount | Other Amount | Grand Total |
|---|--|----------|------|---------------|--------------------|-------------------|--------------------|---------------|--------------------|------------------|---------------|---------------|--------------------|
| <i>15 - MECHANICAL</i> | | | | | | | | | | | | | |
| <i>15090 - Pipe, drng&sewage, concret</i> | | | | | | | | | | | | | |
| | Piping, drainage & sewage, RCP, class 3, no gaskets, 30" dia | 360 | Lnft | \$32.48 | \$11,692.80 | \$43.00 | \$15,480.00 | \$3.22 | \$1,159.20 | \$78.7 / Lnft | \$0.00 | \$0.00 | \$28,332.00 |
| <i>15395 - Cleanouts</i> | | | | | | | | | | | | | |
| | Cleanouts, flr type, rnd top, xtra hvy dty, 30" pipe size | 2 | Each | \$791.91 | \$1,583.82 | \$1,308.00 | \$2,616.00 | \$0.00 | \$0.00 | \$2099.91 / Each | \$0.00 | \$0.00 | \$4,199.82 |
| | <i>MECHANICAL Total</i> | | | | <i>\$13,276.62</i> | | <i>\$18,096.00</i> | | <i>\$1,159.20</i> | | <i>\$0.00</i> | <i>\$0.00</i> | <i>\$32,531.82</i> |
| | <i>Project DBA Total</i> | | | | <i>\$30,092.01</i> | | <i>\$42,860.17</i> | | <i>\$10,496.02</i> | | <i>\$0.00</i> | <i>\$0.00</i> | <i>\$83,448.20</i> |
| | Grand Total | | | | \$30,092.01 | | \$42,860.17 | | \$10,496.02 | | \$0.00 | \$0.00 | \$83,448.20 |

| Category | Percent | Amount |
|-------------------------------------|---------|------------------|
| Labor | 36.06% | \$30,092 |
| Material | 51.36% | \$42,860 |
| Equipment | 12.58% | \$10,496 |
| Subcontractor | 0.00% | \$0 |
| Other | 0.00% | \$0 |
| Net Costs | | \$83,448 |
| Labor Mark-up | 18.00% | \$5,417 |
| Material Mark-up | 15.00% | \$6,429 |
| Subcontractor Mark-up | 5.00% | \$0 |
| Equipment Mark-up | 15.00% | \$1,574 |
| Sales tax (material) | 7.75% | \$3,322 |
| Sales tax (equipment) | 7.75% | \$813 |
| Material Shipping & Handling | 2.50% | \$1,072 |
| Worker's Travel/Subsistence | 0.10% | \$30 |
| Subtotal | | \$102,105 |
| Contractor General Conditions | 12.00% | \$12,253 |
| Subtotal | | \$114,357 |
| Earthquake Insurance | 0.10% | \$114 |
| Subtotal | | \$114,472 |
| Construction Contingency | 25.00% | \$28,618 |
| Subtotal | | \$143,090 |
| Bldg Risk, Liability Auto Ins. | 2.00% | \$2,862 |
| Subtotal | | \$145,952 |
| Performance Bond | 1.00% | \$1,460 |
| Payment Bond | 1.00% | \$1,460 |
| Subtotal | | \$148,871 |
| Engineering Fee | 10.00% | \$8,345 |
| Environmental Permitting (Lump Sum) | - | \$10,000 |
| Total Estimate | | \$167,215 |



City of Carlsbad, Master Drainage Plan

| | |
|--------------------------------|------------------|
| Project Number:: | 128290 |
| Client:: | City of Carlsbad |
| Estimator(s):: | JW / DG |
| Estimating Office:: | Walnut Creek |
| Estimate Issue Number:: | 01 |
| Estimate Original Issue Date:: | 3/14/2006 |
| Estimate Revision Number:: | 04 |
| Estimate Revision Date:: | 6/27/2008 |
| BC Project Manager:: | Chris Herencia |
| Estimate QA/QC Reviewer:: | Bob Ferguson |
| Estimate QA/QC Date:: | 6/27/2008 |

PROJECT LOCATION / PROCESS AREA

Project DBB

| Item | Item Description | Quantity | Unit | Labor \$/Unit | Labor Amount | Materials \$/Unit | Materials Amount | Equip \$/Unit | Equip Amount | Total \$/Unit | Subs Amount | Other Amount | Grand Total |
|--|--|----------|------|---------------|---------------|-------------------|------------------|---------------|-------------------|------------------|---------------|---------------|-------------------|
| Project DBB | | | | | | | | | | | | | |
| 01 - GENERAL REQUIREMENTS | | | | | | | | | | | | | |
| 01200 - General equipment rental | | | | | | | | | | | | | |
| | Trench box, 7200 lbs, 6'x 20' | 10 | Day | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$141.60 | \$1,416.00 | \$141.6 / Day | \$0.00 | \$0.00 | \$1,416.00 |
| | Trench Plates allowance | 1 | Mo | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$900.00 | \$900.00 | \$900 / Mo | \$0.00 | \$0.00 | \$900.00 |
| | GENERAL REQUIREMENTS Total | | | | \$0.00 | | \$0.00 | | \$2,316.00 | | \$0.00 | \$0.00 | \$2,316.00 |
| 02 - SITE CONSTRUCTION | | | | | | | | | | | | | |
| 02020 - Underground marking tape | | | | | | | | | | | | | |
| | Underground tape, detectable aluminum, 2" | 7 | Clf | \$2.34 | \$16.85 | \$3.06 | \$22.03 | \$0.00 | \$0.00 | \$5.4 / Clf | \$0.00 | \$0.00 | \$38.88 |
| 02060 - Site demolition | | | | | | | | | | | | | |
| | Site dml, no hauling, pavement removal, bit, 4" to 6" thick | 482 | Sqyd | \$5.29 | \$2,549.78 | \$0.00 | \$0.00 | \$3.49 | \$1,682.18 | \$8.78 / Sqyd | \$0.00 | \$0.00 | \$4,231.96 |
| | Asphalt disposal - hauling and disposal fee, 4" thick | 482 | Sqyd | \$1.00 | \$482.00 | \$4.70 | \$2,265.40 | \$1.32 | \$636.24 | \$7.02 / Sqyd | \$0.00 | \$0.00 | \$3,383.64 |
| 02170 - Saw cutting | | | | | | | | | | | | | |
| | Saw cutting, asphalt, up to 3" deep | 1450 | Lnft | \$0.48 | \$696.00 | \$0.07 | \$101.50 | \$0.26 | \$377.00 | \$0.81 / Lnft | \$0.00 | \$0.00 | \$1,174.50 |
| | Saw cutting, asphalt, after 3" deep; each addl inch of depth | 1450 | Lnft | \$0.82 | \$1,189.00 | \$0.30 | \$435.00 | \$0.44 | \$638.00 | \$1.56 / Lnft | \$0.00 | \$0.00 | \$2,262.00 |
| 02310 - Fine grade | | | | | | | | | | | | | |
| | Fine grade, fine grade granular base for sidewalks and bikeways | 482 | Sqyd | \$1.06 | \$510.92 | \$0.00 | \$0.00 | \$0.15 | \$72.30 | \$1.21 / Sqyd | \$0.00 | \$0.00 | \$583.22 |
| 02340 - Bedding | | | | | | | | | | | | | |
| | Bedding, crushed stone 3/4" to 1/2" | 530 | Cuyd | \$8.47 | \$4,489.10 | \$32.03 | \$16,975.90 | \$1.89 | \$1,001.70 | \$42.39 / Cuyd | \$0.00 | \$0.00 | \$22,466.70 |
| | Bedding, crushed stone 3/4" to 1/2" | 577 | Cuyd | \$8.47 | \$4,887.19 | \$32.03 | \$18,481.31 | \$1.89 | \$1,090.53 | \$42.39 / Cuyd | \$0.00 | \$0.00 | \$24,459.03 |
| 02360 - Compaction | | | | | | | | | | | | | |
| | Compaction, walk behind, vibrating roller 24" W, 6" lifts, 2 passes | 440 | Cuyd | \$1.90 | \$836.00 | \$0.00 | \$0.00 | \$0.51 | \$224.40 | \$2.41 / Cuyd | \$0.00 | \$0.00 | \$1,060.40 |
| | Compaction, rammer tamper, 6" to 11", 4" lifts, 2 passes | 73 | Cuyd | \$2.93 | \$214.77 | \$0.00 | \$0.00 | \$0.78 | \$57.17 | \$3.71 / Cuyd | \$0.00 | \$0.00 | \$271.94 |
| | Compaction, rammer tamper, 6" to 11", 4" lifts, 2 passes | 456 | Cuyd | \$2.93 | \$1,335.49 | \$0.00 | \$0.00 | \$0.78 | \$355.52 | \$3.71 / Cuyd | \$0.00 | \$0.00 | \$1,691.02 |
| 02450 - Excavating, trench | | | | | | | | | | | | | |
| | Excavate trench, cont ftg, no sht or dewtrg, 4'-6' D, 1-1/2 CY hyd bac | 1027 | Cuyd | \$1.95 | \$2,002.65 | \$0.00 | \$0.00 | \$1.42 | \$1,458.34 | \$3.37 / Cuyd | \$0.00 | \$0.00 | \$3,460.99 |
| 02460 - Hauling | | | | | | | | | | | | | |
| | Hauling, LCY, no loading, 20 c.y. dump truck, 30 MI RT, 0.33 lds/hr | 1181 | Cuyd | \$5.95 | \$7,026.95 | \$0.00 | \$0.00 | \$10.40 | \$12,282.40 | \$16.35 / Cuyd | \$0.00 | \$0.00 | \$19,309.35 |
| | Loading Trucks, F.E. Loader, 3 C.Y.. | 1181 | Cuyd | \$0.74 | \$873.94 | \$0.00 | \$0.00 | \$1.24 | \$1,464.44 | \$1.98 / Cuyd | \$0.00 | \$0.00 | \$2,338.38 |
| | Disposal fee | 59 | Trk | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$105 / Trk | \$0.00 | \$6,200.25 | \$6,200.25 |
| 02490 - Erosion control | | | | | | | | | | | | | |
| | Erosion control allowance: | 1 | Lsum | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$2614 / Lsum | \$0.00 | \$2,614.00 | \$2,614.00 |
| 02570 - Catch basins or manholes | | | | | | | | | | | | | |
| | Catch basins or manholes, concrete, precast, 8' I.D., 8' deep | 3 | Each | \$1,587.50 | \$4,762.50 | \$3,133.31 | \$9,399.93 | \$354.40 | \$1,063.20 | \$5075.21 / Each | \$0.00 | \$0.00 | \$15,225.63 |
| | CB or manholes, conc, slab tops, precast, 8" thick, 4' dia | 3 | Each | \$158.75 | \$476.25 | \$201.00 | \$603.00 | \$35.44 | \$106.32 | \$395.19 / Each | \$0.00 | \$0.00 | \$1,185.57 |
| | Catch bsns or manholes, frs and covs, hvy traffic, 24" diam, 400 lb. | 3 | Each | \$162.82 | \$488.46 | \$260.00 | \$780.00 | \$36.35 | \$109.05 | \$459.17 / Each | \$0.00 | \$0.00 | \$1,377.51 |
| | CB or manholes, inverts, single channel brick, concrete | 3 | Each | \$144.00 | \$432.00 | \$100.00 | \$300.00 | \$0.00 | \$0.00 | \$244 / Each | \$0.00 | \$0.00 | \$732.00 |
| | Catch basins or manholes, steps, standard sizes, aluminum | 10 | Each | \$9.66 | \$96.60 | \$26.50 | \$265.00 | \$0.00 | \$0.00 | \$36.16 / Each | \$0.00 | \$0.00 | \$361.60 |
| | Junction structure | 1 | Each | \$680.00 | \$680.00 | \$6,000.00 | \$6,000.00 | \$0.00 | \$0.00 | \$6680 / Each | \$0.00 | \$0.00 | \$6,680.00 |
| 02610 - Asphalt concrete pavement | | | | | | | | | | | | | |
| | Asphaltic conc pavement, pavement replacement over trench, 4" | 482 | Sqyd | \$35.00 | \$16,870.00 | \$18.00 | \$8,676.00 | \$2.98 | \$1,436.36 | \$55.98 / Sqyd | \$0.00 | \$0.00 | \$26,982.36 |

| Item | Item Description | Quantity | Unit | Labor \$/Unit | Labor Amount | Materials \$/Unit | Materials Amount | Equip \$/Unit | Equip Amount | Total \$/Unit | Subs Amount | Other Amount | Grand Total |
|---|--|----------|------|---------------|--------------------|-------------------|--------------------|---------------|--------------------|---------------|-------------------|--------------------|---------------------|
| <i>02640 - Lines on pav't</i> | | | | | | | | | | | | | |
| | Lines on pvmt, acrylic waterborne, white or yellow, 4" wide | 720 | Lnft | \$0.12 | \$86.40 | \$0.17 | \$122.40 | \$0.08 | \$57.60 | \$0.37 / Lnft | \$0.00 | \$0.00 | \$266.40 |
| <i>02840 - Landscaping</i> | | | | | | | | | | | | | |
| | Landscaping Allowance | 1 | Lsum | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$5000 / Lsum | \$5,000.00 | \$0.00 | \$5,000.00 |
| | Traffic Control Allowance: 2 flaggers, 15' pipe/hr | 1 | Lsum | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$4878 / Lsum | \$0.00 | \$4,878.00 | \$4,878.00 |
| <i>02900 - Pot Holing</i> | | | | | | | | | | | | | |
| | Pot Holing - pipe lines | 28 | Each | \$250.00 | \$7,000.00 | \$0.00 | \$0.00 | \$35.00 | \$980.00 | \$285 / Each | \$0.00 | \$0.00 | \$7,980.00 |
| | <i>SITE CONSTRUCTION Total</i> | | | | <i>\$58,002.85</i> | | <i>\$64,427.47</i> | | <i>\$25,092.76</i> | | <i>\$5,000.00</i> | <i>\$13,692.25</i> | <i>\$166,215.33</i> |
| <i>03 - CONCRETE</i> | | | | | | | | | | | | | |
| <i>03330 - Patching concrete</i> | | | | | | | | | | | | | |
| | 80 Patching conc, wall, wall penetration, non-shrink grout, 24" hole | 2 | Cuyd | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$1000 / Cuyd | \$0.00 | \$2,000.00 | \$2,000.00 |
| | <i>CONCRETE Total</i> | | | | <i>\$0.00</i> | | <i>\$0.00</i> | | <i>\$0.00</i> | | <i>\$0.00</i> | <i>\$2,000.00</i> | <i>\$2,000.00</i> |
| <i>15 - MECHANICAL</i> | | | | | | | | | | | | | |
| <i>15090 - Pipe, drng&sewage, concret</i> | | | | | | | | | | | | | |
| | Piping, drainage & sewage, RCP, class 3, no gaskets, 30" dia | 720 | Lnft | \$32.48 | \$23,385.60 | \$43.00 | \$30,960.00 | \$3.22 | \$2,318.40 | \$78.7 / Lnft | \$0.00 | \$0.00 | \$56,664.00 |
| | Piping, water dist, conc pipe, gasket, 36" dia | 72 | Each | \$3.14 | \$226.08 | \$6.50 | \$468.00 | \$0.00 | \$0.00 | \$9.64 / Each | \$0.00 | \$0.00 | \$694.08 |
| | <i>MECHANICAL Total</i> | | | | <i>\$23,611.68</i> | | <i>\$31,428.00</i> | | <i>\$2,318.40</i> | | <i>\$0.00</i> | <i>\$0.00</i> | <i>\$57,358.08</i> |
| | <i>Project DBB Total</i> | | | | <i>\$81,614.53</i> | | <i>\$95,855.47</i> | | <i>\$29,727.16</i> | | <i>\$5,000.00</i> | <i>\$15,692.25</i> | <i>\$227,889.41</i> |
| | <i>Grand Total</i> | | | | <i>\$81,614.53</i> | | <i>\$95,855.47</i> | | <i>\$29,727.16</i> | | <i>\$5,000.00</i> | <i>\$15,692.25</i> | <i>\$227,889.41</i> |

| Category | Percent | Amount |
|-------------------------------------|---------|------------------|
| Labor | 35.81% | \$81,615 |
| Material | 42.06% | \$95,855 |
| Equipment | 13.04% | \$29,727 |
| Subcontractor | 2.19% | \$5,000 |
| Other | 6.89% | \$15,692 |
| Net Costs | | \$227,889 |
| Labor Mark-up | 18.00% | \$14,691 |
| Material Mark-up | 15.00% | \$14,378 |
| Subcontractor Mark-up | 5.00% | \$250 |
| Equipment Mark-up | 15.00% | \$4,459 |
| Sales tax (material) | 7.75% | \$7,429 |
| Sales tax (equipment) | 7.75% | \$2,304 |
| Material Shipping & Handling | 2.50% | \$2,396 |
| Worker's Travel/Subsistence | 0.10% | \$82 |
| Subtotal | | \$273,878 |
| Contractor General Conditions | 12.00% | \$32,865 |
| Subtotal | | \$306,743 |
| Earthquake Insurance | 0.10% | \$307 |
| Subtotal | | \$307,050 |
| Construction Contingency | 25.00% | \$76,763 |
| Subtotal | | \$383,813 |
| Bldg Risk, Liability Auto Ins. | 2.00% | \$7,676 |
| Subtotal | | \$391,489 |
| Performance Bond | 1.00% | \$3,915 |
| Payment Bond | 1.00% | \$3,915 |
| Subtotal | | \$399,319 |
| Engineering Fee | 10.00% | \$22,789 |
| Environmental Permitting (Lump Sum) | - | \$7,000 |
| Total Estimate | | \$429,108 |



City of Carlsbad, Master Drainage Plan

| | |
|--------------------------------|------------------|
| Project Number:: | 128290 |
| Client:: | City of Carlsbad |
| Estimator(s):: | JW / DG |
| Estimating Office:: | Walnut Creek |
| Estimate Issue Number:: | 01 |
| Estimate Original Issue Date:: | 3/14/2006 |
| Estimate Revision Number:: | 04 |
| Estimate Revision Date:: | 6/27/2008 |
| BC Project Manager:: | Chris Herencia |
| Estimate QA/QC Reviewer:: | Butch Matthews |
| Estimate QA/QC Date:: | 6/27/2008 |

PROJECT LOCATION / PROCESS AREA

Project DFA

| Item | Item Description | Quantity | Unit | Labor \$/Unit | Labor Amount | Materials \$/Unit | Materials Amount | Equip \$/Unit | Equip Amount | Total \$/Unit | Subs Amount | Other Amount | Grand Total |
|---|--|----------|------|---------------|-------------------|-------------------|--------------------|---------------|--------------------|------------------|-----------------|-------------------|--------------------|
| Project DFA | | | | | | | | | | | | | |
| 01 - GENERAL REQUIREMENTS | | | | | | | | | | | | | |
| 01200 - General equipment rental | | | | | | | | | | | | | |
| | Trench box, 9500 lbs, 8'x 20' | 10 | Day | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$240.00 | \$2,400.00 | \$240 / Day | \$0.00 | \$0.00 | \$2,400.00 |
| | Trench Plates allowance | 1 | Mo | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$900.00 | \$900.00 | \$900 / Mo | \$0.00 | \$0.00 | \$900.00 |
| 01210 - Lifting and hoisting equipment | | | | | | | | | | | | | |
| | Rent crane truck mounted, hydraulic, 55 ton capacity - Type B | 10 | Day | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$990.00 | \$9,900.00 | \$1891.6 / Day | \$901.60 | \$0.00 | \$10,801.60 |
| | GENERAL REQUIREMENTS Total | | | | \$0.00 | | \$0.00 | | \$13,200.00 | | \$901.60 | \$0.00 | \$14,101.60 |
| 02 - SITE CONSTRUCTION | | | | | | | | | | | | | |
| 02320 - Backfill | | | | | | | | | | | | | |
| | Backfill, dozer backfilling, trench, up to 300' haul, no compaction | 175 | Cuyd | \$0.80 | \$140.00 | \$0.00 | \$0.00 | \$1.28 | \$224.00 | \$2.08 / Cuyd | \$0.00 | \$0.00 | \$364.00 |
| 02340 - Bedding | | | | | | | | | | | | | |
| | Base course, large areas, crushed 3/4" stone, compacted to 9" deep | 355 | Sqyd | \$0.80 | \$284.00 | \$8.06 | \$2,861.30 | \$1.02 | \$362.10 | \$9.88 / Sqyd | \$0.00 | \$0.00 | \$3,507.40 |
| 02360 - Compaction | | | | | | | | | | | | | |
| | Compaction, walk behind, vibrating roller 24" W, 6" lifts, 2 passes | 175 | Cuyd | \$1.90 | \$332.50 | \$0.00 | \$0.00 | \$0.51 | \$89.25 | \$2.41 / Cuyd | \$0.00 | \$0.00 | \$421.75 |
| | Compaction, rammer tamper, 6" to 11", 4" lifts, bedding | 175 | Cuyd | \$2.93 | \$512.75 | \$0.00 | \$0.00 | \$0.78 | \$136.50 | \$3.71 / Cuyd | \$0.00 | \$0.00 | \$649.25 |
| | Compaction, rammer tamper, 6" to 11", 4" lifts, backfill | 175 | Cuyd | \$2.93 | \$512.75 | \$0.00 | \$0.00 | \$0.78 | \$136.50 | \$3.71 / Cuyd | \$0.00 | \$0.00 | \$649.25 |
| 02450 - Excavating, trench | | | | | | | | | | | | | |
| | Excavate trench, common earth curb, 6'-10' deep, 1-1/2 CY hyd | 400 | Cuyd | \$1.76 | \$704.00 | \$0.00 | \$0.00 | \$1.28 | \$512.00 | \$3.04 / Cuyd | \$0.00 | \$0.00 | \$1,216.00 |
| 02460 - Hauling | | | | | | | | | | | | | |
| | Hauling, LCY, no loading, 20 c.y. dump truck, 30 MI RT, 0.33 lds/hr | 175 | Cuyd | \$5.95 | \$1,041.25 | \$0.00 | \$0.00 | \$10.40 | \$1,820.00 | \$16.35 / Cuyd | \$0.00 | \$0.00 | \$2,861.25 |
| | Loading Trucks, F.E. Loader, 3 C.Y.. | 175 | Cuyd | \$0.74 | \$129.50 | \$0.00 | \$0.00 | \$1.24 | \$217.00 | \$1.98 / Cuyd | \$0.00 | \$0.00 | \$346.50 |
| 02470 - Soil stabilization | | | | | | | | | | | | | |
| | Soil stabilization, geotextile fabric, woven, H.D., 600 lb. tensile st | 50 | Sqyd | \$0.32 | \$16.00 | \$1.85 | \$92.50 | \$0.00 | \$0.00 | \$2.17 / Sqyd | \$0.00 | \$0.00 | \$108.50 |
| 02480 - Rip-rap | | | | | | | | | | | | | |
| | Backing Material class #1 | 5 | Cuyd | \$17.00 | \$85.00 | \$60.00 | \$300.00 | \$20.00 | \$100.00 | \$97 / Cuyd | \$0.00 | \$0.00 | \$485.00 |
| | Rip-rap, mach placed for slp protec, 18" min thick. not grouted | 25 | Sqyd | \$56.55 | \$1,413.75 | \$49.55 | \$1,238.75 | \$12.33 | \$308.25 | \$118.43 / Sqyd | \$0.00 | \$0.00 | \$2,960.75 |
| 02490 - Erosion control | | | | | | | | | | | | | |
| | Erosion control allowance: | 1 | Lsum | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$2614 / Lsum | \$0.00 | \$2,614.00 | \$2,614.00 |
| 02570 - Catch basins or manholes | | | | | | | | | | | | | |
| | Junction structure | 2 | Each | \$680.00 | \$1,360.00 | \$6,000.00 | \$12,000.00 | \$0.00 | \$0.00 | \$6680 / Each | \$0.00 | \$0.00 | \$13,360.00 |
| | CB or manholes, conc, precast, 4' ID, 6' deep | 2 | Each | \$549.75 | \$1,099.50 | \$1,050.00 | \$2,100.00 | \$148.32 | \$296.64 | \$1748.07 / Each | \$0.00 | \$0.00 | \$3,496.14 |
| | CB or manholes, conc, slab tops, precast, 8" thick, 4' dia | 2 | Each | \$158.75 | \$317.50 | \$201.00 | \$402.00 | \$35.44 | \$70.88 | \$395.19 / Each | \$0.00 | \$0.00 | \$790.38 |
| | Catch bsns or manholes, frs and covs, hvy traffic, 24" diam, 400 lb. | 2 | Each | \$162.82 | \$325.64 | \$260.00 | \$520.00 | \$36.35 | \$72.70 | \$459.17 / Each | \$0.00 | \$0.00 | \$918.34 |
| | CB or manholes, inverts, single channel brick, concrete | 2 | Each | \$144.00 | \$288.00 | \$100.00 | \$200.00 | \$0.00 | \$0.00 | \$244 / Each | \$0.00 | \$0.00 | \$488.00 |
| | Catch basins or manholes, steps, standard sizes, aluminum | 6 | Each | \$9.66 | \$57.96 | \$26.50 | \$159.00 | \$0.00 | \$0.00 | \$36.16 / Each | \$0.00 | \$0.00 | \$216.96 |
| | SITE CONSTRUCTION Total | | | | \$8,620.10 | | \$19,873.55 | | \$4,345.82 | | \$0.00 | \$2,614.00 | \$35,453.47 |

| Item | Item Description | Quantity | Unit | Labor \$/Unit | Labor Amount | Materials \$/Unit | Materials Amount | Equip \$/Unit | Equip Amount | Total \$/Unit | Subs Amount | Other Amount | Grand Total |
|---|--|----------|------|---------------|--------------------|-------------------|--------------------|---------------|--------------------|-----------------|-----------------|-------------------|---------------------|
| 15 - MECHANICAL | | | | | | | | | | | | | |
| 15090 - Pipe, drng&sewage, concret | | | | | | | | | | | | | |
| | Piping, drainage & sewage, RCP, class 3, no gaskets, 72" dia | 8 | Lnft | \$71.46 | \$571.68 | \$275.00 | \$2,200.00 | \$7.09 | \$56.72 | \$353.55 / Lnft | \$0.00 | \$0.00 | \$2,828.40 |
| | Piping, water dist, conc pipe, gasket, 72" dia | 1 | Each | \$3.14 | \$3.14 | \$36.00 | \$36.00 | \$0.00 | \$0.00 | \$39.14 / Each | \$0.00 | \$0.00 | \$39.14 |
| | Piping, drainage & sewage, RCP, class 3, no gaskets, 48" dia | 16 | Lnft | \$44.66 | \$714.56 | \$120.00 | \$1,920.00 | \$4.43 | \$70.88 | \$169.09 / Lnft | \$0.00 | \$0.00 | \$2,705.44 |
| | Piping, water dist, conc pipe, gasket, 48" dia | 2 | Each | \$3.14 | \$6.28 | \$10.00 | \$20.00 | \$0.00 | \$0.00 | \$13.14 / Each | \$0.00 | \$0.00 | \$26.28 |
| 15095 - Process Equipment | | | | | | | | | | | | | |
| | Process Equipment - Vortech Precast | 1 | Each | \$3,850.00 | \$3,850.00 | \$50,400.00 | \$50,400.00 | \$0.00 | \$0.00 | \$54250 / Each | \$0.00 | \$0.00 | \$54,250.00 |
| | | | | | | | | | | | | | |
| | MECHANICAL Total | | | | \$5,145.66 | | \$54,576.00 | | \$127.60 | | \$0.00 | \$0.00 | \$59,849.26 |
| | Project BLU Total | | | | \$13,765.76 | | \$74,449.55 | | \$17,673.42 | | \$901.60 | \$2,614.00 | \$109,404.33 |
| | Grand Total | | | | \$13,765.76 | | \$74,449.55 | | \$17,673.42 | | \$901.60 | \$2,614.00 | \$109,404.33 |

| Category | Percent | Amount |
|-------------------------------------|---------|------------------|
| Labor | 12.58% | \$13,766 |
| Material | 68.05% | \$74,450 |
| Equipment | 16.15% | \$17,673 |
| Subcontractor | 0.82% | \$902 |
| Other | 2.39% | \$2,614 |
| Net Costs | | \$109,404 |
| Labor Mark-up | 18.00% | \$2,478 |
| Material Mark-up | 15.00% | \$11,167 |
| Subcontractor Mark-up | 5.00% | \$45 |
| Equipment Mark-up | 15.00% | \$2,651 |
| Sales tax (material) | 7.75% | \$5,770 |
| Sales tax (equipment) | 7.75% | \$1,370 |
| Material Shipping & Handling | 2.50% | \$1,861 |
| Worker's Travel/Subsistence | 0.10% | \$14 |
| Subtotal | | \$134,760 |
| Contractor General Conditions | 12.00% | \$16,171 |
| Subtotal | | \$150,931 |
| Earthquake Insurance | 0.10% | \$151 |
| Subtotal | | \$151,082 |
| Construction Contingency | 25.00% | \$37,771 |
| Subtotal | | \$188,853 |
| Bldg Risk, Liability Auto Ins. | 2.00% | \$3,777 |
| Subtotal | | \$192,630 |
| Performance Bond | 1.00% | \$1,926 |
| Payment Bond | 1.00% | \$1,926 |
| Subtotal | | \$196,483 |
| Engineering Fee | 10.00% | \$10,940 |
| Environmental Permitting (Lump Sum) | - | \$49,000 |
| Total Estimate | | \$256,423 |



City of Carlsbad, Master Drainage Plan

| | |
|--------------------------------|------------------|
| Project Number:: | 128290 |
| Client:: | City of Carlsbad |
| Estimator(s):: | JW / DG |
| Estimating Office:: | Walnut Creek |
| Estimate Issue Number:: | 01 |
| Estimate Original Issue Date:: | 3/14/2006 |
| Estimate Revision Number:: | 04 |
| Estimate Revision Date:: | 6/27/2008 |
| BC Project Manager:: | Chris Herencia |
| Estimate QA/QC Reviewer:: | Butch Matthews |
| Estimate QA/QC Date:: | 6/27/2008 |

PROJECT LOCATION / PROCESS AREA

Project DQB

| Item | Item Description | Quantity | Unit | Labor \$/Unit | Labor Amount | Materials \$/Unit | Materials Amount | Equip \$/Unit | Equip Amount | Total \$/Unit | Subs Amount | Other Amount | Grand Total |
|---|--|----------|------|---------------|---------------------|-------------------|---------------------|---------------|--------------------|------------------|---------------|-------------------|---------------------|
| Project DQB | | | | | | | | | | | | | |
| 01 - GENERAL REQUIREMENTS | | | | | | | | | | | | | |
| 01200 - General equipment rental | | | | | | | | | | | | | |
| | Trench box, 9500 lbs, 8'x 20' | 20 | Day | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$240.00 | \$4,800.00 | \$240 / Day | \$0.00 | \$0.00 | \$4,800.00 |
| | GENERAL REQUIREMENTS Total | | | | \$0.00 | | \$0.00 | | \$4,800.00 | | \$0.00 | \$0.00 | \$4,800.00 |
| 02 - SITE CONSTRUCTION | | | | | | | | | | | | | |
| 02020 - Underground marking tape | | | | | | | | | | | | | |
| | Underground tape, detectable aluminum, 2" | 25 | Clf | \$2.34 | \$58.50 | \$3.06 | \$76.50 | \$0.00 | \$0.00 | \$5.4 / Clf | \$0.00 | \$0.00 | \$135.00 |
| 02320 - Backfill | | | | | | | | | | | | | |
| | Backfill, dozer backfilling, trench, up to 300' haul, no compaction | 3241 | Cuyd | \$0.80 | \$2,592.56 | \$0.00 | \$0.00 | \$1.28 | \$4,148.10 | \$2.08 / Cuyd | \$0.00 | \$0.00 | \$6,740.66 |
| 02340 - Bedding | | | | | | | | | | | | | |
| | Bedding, crushed stone 3/4" to 1/2" | 1000 | Cuyd | \$8.47 | \$8,470.00 | \$32.03 | \$32,030.00 | \$1.89 | \$1,890.00 | \$42.39 / Cuyd | \$0.00 | \$0.00 | \$42,390.00 |
| 02360 - Compaction | | | | | | | | | | | | | |
| | Compaction, trench, walk behind, vib. plate, bedding | 1846 | Cuyd | \$1.90 | \$3,506.45 | \$0.00 | \$0.00 | \$0.51 | \$941.21 | \$2.41 / Cuyd | \$0.00 | \$0.00 | \$4,447.66 |
| | Compaction, trench, walk behind, vib. plate, subgrade | 278 | Cuyd | \$1.90 | \$527.82 | \$0.00 | \$0.00 | \$0.51 | \$141.68 | \$2.41 / Cuyd | \$0.00 | \$0.00 | \$669.50 |
| | Compaction, trench, walk behind, vib. plate, backfill | 2917 | Cuyd | \$1.90 | \$5,541.73 | \$0.00 | \$0.00 | \$0.51 | \$1,487.52 | \$2.41 / Cuyd | \$0.00 | \$0.00 | \$7,029.25 |
| 02450 - Excavating, trench | | | | | | | | | | | | | |
| | Excavate trench, no sht or dewtrg, 4'-6' D, 1-1/2 CY hyd bac | 5417 | Cuyd | \$1.95 | \$10,562.57 | \$0.00 | \$0.00 | \$1.42 | \$7,691.71 | \$3.37 / Cuyd | \$0.00 | \$0.00 | \$18,254.28 |
| 02570 - Catch basins or manholes | | | | | | | | | | | | | |
| | Junction structure | 1 | Each | \$680.00 | \$680.00 | \$6,000.00 | \$6,000.00 | \$0.00 | \$0.00 | \$6680 / Each | \$0.00 | \$0.00 | \$6,680.00 |
| | Catch basins or manholes, concrete, precast, 6' I.D., 6' deep | 5 | Each | \$846.67 | \$4,233.35 | \$1,850.00 | \$9,250.00 | \$189.01 | \$945.05 | \$2885.68 / Each | \$0.00 | \$0.00 | \$14,428.40 |
| | CB or manholes, conc, slab tops, precast, 8" thick, 4' dia | 5 | Each | \$158.75 | \$793.75 | \$201.00 | \$1,005.00 | \$35.44 | \$177.20 | \$395.19 / Each | \$0.00 | \$0.00 | \$1,975.95 |
| | Catch bsns or manholes, frs and covs, hvy traffic, 24" diam, 400 lb. | 5 | Each | \$162.82 | \$814.10 | \$260.00 | \$1,300.00 | \$36.35 | \$181.75 | \$459.17 / Each | \$0.00 | \$0.00 | \$2,295.85 |
| | CB or manholes, inverts, single channel brick, concrete | 5 | Each | \$144.00 | \$720.00 | \$100.00 | \$500.00 | \$0.00 | \$0.00 | \$244 / Each | \$0.00 | \$0.00 | \$1,220.00 |
| | Catch basins or manholes, steps, standard sizes, aluminum | 15 | Each | \$9.66 | \$144.90 | \$26.50 | \$397.50 | \$0.00 | \$0.00 | \$36.16 / Each | \$0.00 | \$0.00 | \$542.40 |
| | SITE CONSTRUCTION Total | | | | \$36,172.98 | | \$47,356.50 | | \$17,245.26 | | \$0.00 | \$0.00 | \$100,774.74 |
| 03 - CONCRETE | | | | | | | | | | | | | |
| 03150 - Concrete, ready mix | | | | | | | | | | | | | |
| | Headwall | 5 | Cuyd | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$1000 / Cuyd | \$0.00 | \$5,000.00 | \$5,000.00 |
| | CONCRETE Total | | | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | \$5,000.00 | \$5,000.00 |
| 15 - MECHANICAL | | | | | | | | | | | | | |
| 15090 - Pipe, drng&sewage, concret | | | | | | | | | | | | | |
| | Piping, drainage & sewage, RCP, class 3, no gaskets, 36" dia | 2500 | Lnft | \$39.70 | \$99,250.00 | \$73.00 | \$182,500.00 | \$3.94 | \$9,850.00 | \$116.64 / Lnft | \$0.00 | \$0.00 | \$291,600.00 |
| | Piping, drainage & sewage, RCP, class 3, no gaskets, 36" dia | 250 | Lnft | \$39.70 | \$9,925.00 | \$73.00 | \$18,250.00 | \$3.94 | \$985.00 | \$116.64 / Lnft | \$0.00 | \$0.00 | \$29,160.00 |
| | MECHANICAL Total | | | | \$99,250.00 | | \$182,500.00 | | \$9,850.00 | | \$0.00 | \$0.00 | \$291,600.00 |
| | Project DQB Total | | | | \$135,422.98 | | \$229,856.50 | | \$31,895.26 | | \$0.00 | \$5,000.00 | \$402,174.74 |
| | Grand Total | | | | \$135,422.98 | | \$229,856.50 | | \$31,895.26 | | \$0.00 | \$5,000.00 | \$402,174.74 |

| Category | Percent | Amount |
|-------------------------------------|---------|------------------|
| Labor | 33.67% | \$135,423 |
| Material | 57.15% | \$229,857 |
| Equipment | 7.93% | \$31,895 |
| Subcontractor | 0.00% | \$0 |
| Other | 1.24% | \$5,000 |
| Net Costs | | \$402,175 |
| Labor Mark-up | 18.00% | \$24,376 |
| Material Mark-up | 15.00% | \$34,478 |
| Subcontractor Mark-up | 5.00% | \$0 |
| Equipment Mark-up | 15.00% | \$4,784 |
| Sales tax (material) | 7.75% | \$17,814 |
| Sales tax (equipment) | 7.75% | \$2,472 |
| Material Shipping & Handling | 2.50% | \$5,746 |
| Worker's Travel/Subsistence | 0.10% | \$135 |
| Subtotal | | \$491,981 |
| Contractor General Conditions | 12.00% | \$59,038 |
| Subtotal | | \$551,019 |
| Earthquake Insurance | 0.10% | \$551 |
| Subtotal | | \$551,570 |
| Construction Contingency | 20.00% | \$110,314 |
| Subtotal | | \$661,884 |
| Bldg Risk, Liability Auto Ins. | 2.00% | \$13,238 |
| Subtotal | | \$675,122 |
| Performance Bond | 1.00% | \$6,751 |
| Payment Bond | 1.00% | \$6,751 |
| Subtotal | | \$688,624 |
| Engineering Fee | 10.00% | \$40,217 |
| Environmental Permitting (Lump Sum) | - | \$17,000 |
| Total Estimate | | \$745,842 |



City of Carlsbad, Master Drainage Plan

| | |
|--------------------------------|------------------|
| Project Number:: | 128290 |
| Client:: | City of Carlsbad |
| Estimator(s):: | JW / DG |
| Estimating Office:: | Walnut Creek |
| Estimate Issue Number:: | 01 |
| Estimate Original Issue Date:: | 3/14/2006 |
| Estimate Revision Number:: | 04 |
| Estimate Revision Date:: | 6/27/2008 |
| BC Project Manager:: | Chris Herencia |
| Estimate QA/QC Reviewer:: | Butch Matthews |
| Estimate QA/QC Date:: | 6/27/2008 |

PROJECT LOCATION / PROCESS AREA

Project DH

| Item | Item Description | Quantity | Unit | Labor \$/Unit | Labor Amount | Materials \$/Unit | Materials Amount | Equip \$/Unit | Equip Amount | Total \$/Unit | Subs Amount | Other Amount | Grand Total |
|------------------------------------|---|----------|------|---------------|--------------|-------------------|------------------|---------------|--------------|-----------------|-------------|--------------|--------------|
| Project DH | | | | | | | | | | | | | |
| 02 - SITE CONSTRUCTION | | | | | | | | | | | | | |
| 02060 - Site demolition | | | | | | | | | | | | | |
| | Site demo, Area vegetation removal | 1 | Acre | \$1,758.00 | \$2,004.12 | \$0.00 | \$0.00 | \$3,692.00 | \$4,208.88 | \$5450 / Acre | \$0.00 | \$0.00 | \$6,213.00 |
| 02330 - Backfill, structural | | | | | | | | | | | | | |
| | Backfill, side slope fill | 405 | Cuyd | \$0.60 | \$242.74 | \$0.00 | \$0.00 | \$1.20 | \$486.27 | \$1.8 / Cuyd | \$0.00 | \$0.00 | \$729.01 |
| 02360 - Compaction | | | | | | | | | | | | | |
| | Compaction, rammer tamper, 6" to 11", 4" lifts, backfill | 2750 | Cuyd | \$2.93 | \$8,057.50 | \$0.00 | \$0.00 | \$0.78 | \$2,145.00 | \$3.71 / Cuyd | \$0.00 | \$0.00 | \$10,202.50 |
| 02410 - Excavation, bulk, scrapers | | | | | | | | | | | | | |
| | Excavation, self prop scraper, 14 CY 1/4 push dozer | 2500 | Cuyd | \$1.29 | \$3,225.00 | \$0.00 | \$0.00 | \$5.19 | \$12,975.00 | \$6.48 / Cuyd | \$0.00 | \$0.00 | \$16,200.00 |
| 02430 - Fill | | | | | | | | | | | | | |
| | Fill, spread fill, with dozer | 2750 | Cuyd | \$0.72 | \$1,980.00 | \$0.00 | \$0.00 | \$1.15 | \$3,162.50 | \$1.87 / Cuyd | \$0.00 | \$0.00 | \$5,142.50 |
| 02460 - Hauling | | | | | | | | | | | | | |
| | Backfill, dozer backfilling no compaction | 2750 | Cuyd | \$0.80 | \$2,200.00 | \$0.00 | \$0.00 | \$1.28 | \$3,520.00 | \$2.08 / Cuyd | \$0.00 | \$0.00 | \$5,720.00 |
| 02480 - Rip-rap | | | | | | | | | | | | | |
| | Rip-rap, gabions, galv steel mesh boxes, stone filled, 36" deep | 200 | Cuyd | \$49.95 | \$9,990.00 | \$60.56 | \$12,112.00 | \$16.44 | \$3,288.00 | \$126.95 / Cuyd | \$0.00 | \$0.00 | \$25,390.00 |
| 02490 - Erosion control | | | | | | | | | | | | | |
| | Erosion control, polypropylene mesh, stapled, 6.5 oz./s.y | 2052 | Sqyd | \$0.47 | \$964.52 | \$1.40 | \$2,873.02 | \$0.00 | \$0.00 | \$1.87 / Sqyd | \$0.00 | \$0.00 | \$3,837.54 |
| 02600 - Base course | | | | | | | | | | | | | |
| | Area aggregate, crushed 3/4" stone, compacted to 9" deep | 4148 | Sqyd | \$0.80 | \$3,318.40 | \$8.06 | \$33,432.88 | \$1.02 | \$4,230.96 | \$9.88 / Sqyd | \$0.00 | \$0.00 | \$40,982.24 |
| | SITE CONSTRUCTION Total | | | | \$31,982.28 | | \$48,417.90 | | \$34,016.61 | | \$0.00 | \$0.00 | \$114,416.79 |
| | Project DH Total | | | | \$31,982.28 | | \$48,417.90 | | \$34,016.61 | | \$0.00 | \$0.00 | \$114,416.79 |
| | Grand Total | | | | \$31,982.28 | | \$48,417.90 | | \$34,016.61 | | \$0.00 | \$0.00 | \$114,416.79 |

| Category | Percent | Amount |
|-------------------------------------|---------|------------------|
| Labor | 27.95% | \$31,982 |
| Material | 42.32% | \$48,418 |
| Equipment | 29.73% | \$34,017 |
| Subcontractor | 0.00% | \$0 |
| Other | 0.00% | \$0 |
| Net Costs | | \$114,417 |
| Labor Mark-up | 18.00% | \$5,757 |
| Material Mark-up | 15.00% | \$7,263 |
| Subcontractor Mark-up | 5.00% | \$0 |
| Equipment Mark-up | 15.00% | \$5,102 |
| Sales tax (material) | 7.75% | \$3,752 |
| Sales tax (equipment) | 7.75% | \$2,636 |
| Material Shipping & Handling | 2.50% | \$1,210 |
| Worker's Travel/Subsistence | 0.10% | \$32 |
| Subtotal | | \$140,170 |
| Contractor General Conditions | 12.00% | \$16,820 |
| Subtotal | | \$156,990 |
| Earthquake Insurance | 0.10% | \$157 |
| Subtotal | | \$157,147 |
| Construction Contingency | 25.00% | \$39,287 |
| Subtotal | | \$196,434 |
| Bldg Risk, Liability Auto Ins. | 2.00% | \$3,929 |
| Subtotal | | \$200,363 |
| Performance Bond | 1.00% | \$2,004 |
| Payment Bond | 1.00% | \$2,004 |
| Subtotal | | \$204,370 |
| Engineering Fee | 10.00% | \$11,442 |
| Environmental Permitting (Lump Sum) | - | \$17,000 |
| Total Estimate | | \$232,812 |



City of Carlsbad, Master Drainage Plan

| | |
|--------------------------------|------------------|
| Project Number:: | 128290 |
| Client:: | City of Carlsbad |
| Estimator(s):: | JW / DG |
| Estimating Office:: | Walnut Creek |
| Estimate Issue Number:: | 01 |
| Estimate Original Issue Date:: | 3/14/2006 |
| Estimate Revision Number:: | 04 |
| Estimate Revision Date:: | 6/27/2008 |
| BC Project Manager:: | Chris Herencia |
| Estimate QA/QC Reviewer:: | Butch Matthews |
| Estimate QA/QC Date:: | 6/27/2008 |

PROJECT LOCATION / PROCESS AREA

Project DZ

| Item | Item Description | Quantity | Unit | Labor \$/Unit | Labor Amount | Materials \$/Unit | Materials Amount | Equip \$/Unit | Equip Amount | Total \$/Unit | Subs Amount | Other Amount | Grand Total |
|------------------------------------|---|----------|------|---------------|--------------------|-------------------|-------------------|---------------|-------------------|---------------|-----------------|---------------------|---------------------|
| Project DZ | | | | | | | | | | | | | |
| 02 - SITE CONSTRUCTION | | | | | | | | | | | | | |
| 02310 - Fine grade | | | | | | | | | | | | | |
| | Fine grade under asphalt | 333 | Sqyd | \$0.26 | \$86.58 | \$0.00 | \$0.00 | \$0.21 | \$69.93 | \$0.47 / Sqyd | \$0.00 | \$0.00 | \$156.51 |
| 02360 - Compaction | | | | | | | | | | | | | |
| | Compaction, rammer tamper, 6" to 11", 4" lifts, backfill | 734 | Cuyd | \$2.93 | \$2,150.62 | \$0.00 | \$0.00 | \$0.78 | \$572.52 | \$3.71 / Cuyd | \$0.00 | \$0.00 | \$2,723.14 |
| 02450 - Excavating, trench | | | | | | | | | | | | | |
| | Excavate trench, common earth curb, 6'-10' deep, 1-1/2 CY hyd | 2000 | Cuyd | \$1.76 | \$3,520.00 | \$0.00 | \$0.00 | \$1.28 | \$2,560.00 | \$3.04 / Cuyd | \$0.00 | \$0.00 | \$6,080.00 |
| 02480 - Rip-rap | | | | | | | | | | | | | |
| | Rip-rap, energy dissipater | 155 | Sqyd | \$55.00 | \$8,525.00 | \$25.00 | \$3,875.00 | \$18.70 | \$2,898.50 | \$98.7 / Sqyd | \$0.00 | \$0.00 | \$15,298.50 |
| 02490 - Erosion control | | | | | | | | | | | | | |
| | Erosion control, polypropylene mesh, stapled, 6.5 oz./s.y | 2052 | Sqyd | \$0.47 | \$964.52 | \$1.40 | \$2,873.02 | \$0.00 | \$0.00 | \$1.87 / Sqyd | \$0.00 | \$0.00 | \$3,837.54 |
| 02600 - Base course | | | | | | | | | | | | | |
| | Area aggregate, crushed 3/4" stone, compacted to 9" deep | 155 | Sqyd | \$0.80 | \$124.00 | \$8.06 | \$1,249.30 | \$1.02 | \$158.10 | \$9.88 / Sqyd | \$0.00 | \$0.00 | \$1,531.40 |
| 02840 - Landscaping | | | | | | | | | | | | | |
| | Landscaping Allowance: | 1 | Lsum | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$500 / Lsum | \$500.00 | \$0.00 | \$500.00 |
| | Traffic Control Allowance: | 1 | Lsum | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$500 / Lsum | \$0.00 | \$500.00 | \$500.00 |
| | SITE CONSTRUCTION Total | | | | \$15,370.72 | | \$7,997.32 | | \$6,259.05 | | \$500.00 | \$500.00 | \$30,627.09 |
| 03 - CONCRETE | | | | | | | | | | | | | |
| 03150 - Concrete, ready mix | | | | | | | | | | | | | |
| | 10'x12' RCB Culvert (2) | 375 | Cuyd | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$1000 / Cuyd | \$0.00 | \$375,000.00 | \$375,000.00 |
| | Headwall | 5 | Cuyd | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$1000 / Cuyd | \$0.00 | \$5,000.00 | \$5,000.00 |
| | Headwall | 5 | Cuyd | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$1000 / Cuyd | \$0.00 | \$5,000.00 | \$5,000.00 |
| | CONCRETE Total | | | | \$0.00 | | \$0.00 | | \$0.00 | | \$0.00 | \$385,000.00 | \$385,000.00 |
| | Project DZ Total | | | | \$15,370.72 | | \$7,997.32 | | \$6,259.05 | | \$500.00 | \$385,500.00 | \$415,627.09 |
| | | | | | \$15,370.72 | | \$7,997.32 | | \$6,259.05 | | \$500.00 | \$385,500.00 | \$415,627.09 |

| Category | Percent | Amount |
|-------------------------------------|---------|------------------|
| Labor | 3.70% | \$15,371 |
| Material | 1.92% | \$7,997 |
| Equipment | 1.51% | \$6,259 |
| Subcontractor | 0.12% | \$500 |
| Other | 92.75% | \$385,500 |
| Net Costs | | \$415,627 |
| Labor Mark-up | 18.00% | \$2,767 |
| Material Mark-up | 15.00% | \$1,200 |
| Subcontractor Mark-up | 5.00% | \$25 |
| Equipment Mark-up | 15.00% | \$939 |
| Sales tax (material) | 7.75% | \$620 |
| Sales tax (equipment) | 7.75% | \$485 |
| Material Shipping & Handling | 2.50% | \$200 |
| Worker's Travel/Subsistence | 0.10% | \$15 |
| Subtotal | | \$421,877 |
| Contractor General Conditions | 12.00% | \$50,625 |
| Subtotal | | \$472,503 |
| Earthquake Insurance | 0.10% | \$473 |
| Subtotal | | \$472,975 |
| Construction Contingency | 20.00% | \$94,595 |
| Subtotal | | \$567,570 |
| Bldg Risk, Liability Auto Ins. | 2.00% | \$11,351 |
| Subtotal | | \$578,922 |
| Performance Bond | 1.00% | \$5,789 |
| Payment Bond | 1.00% | \$5,789 |
| Subtotal | | \$590,500 |
| Engineering Fee | 10.00% | \$41,563 |
| Environmental Permitting (Lump Sum) | - | \$10,000 |
| Total Estimate | | \$642,063 |

| Item Description | Quantity | Unit | Labor \$/Unit | Labor Amount | Materials \$/Unit | Materials Amount | Equip \$/Unit | Equip Amount | Total \$/Unit | Subs Amount | Other Amount | Grand Total |
|--|----------|------|------------------|-----------------|----------------------|---------------------|------------------|-----------------|------------------|----------------|-----------------|----------------|
| 10'x12' RCB Culvert (2) | 309.40 | Cuyd | | \$0.00 | | \$0.00 | | \$0.00 | \$1000 / Cuyd | | \$1,000.00 | \$1,000.00 |
| 12'x5' RCB Culvert | 309.40 | Cuyd | | \$0.00 | | \$0.00 | | \$0.00 | \$1000 / Cuyd | | \$1,000.00 | \$1,000.00 |
| 3'x6' RCB Culvert | 170.00 | Cuyd | | \$0.00 | | \$0.00 | | \$0.00 | \$1000 / Cuyd | | \$1,000.00 | \$1,000.00 |
| 4.3'x5.7' RCB Culvert | | Cuyd | | \$0.00 | | \$0.00 | | \$0.00 | \$1000 / Cuyd | | \$1,000.00 | \$1,000.00 |
| 4'x10' RCB Culvert | 170.00 | Cuyd | | \$0.00 | | \$0.00 | | \$0.00 | \$1000 / Cuyd | | \$1,000.00 | \$1,000.00 |
| 5-12'x12' RCB Culverts | 170.00 | Cuyd | | \$0.00 | | \$0.00 | | \$0.00 | \$1000 / Cuyd | | \$1,000.00 | \$1,000.00 |
| 5'x32" RCB Culvert | 170.00 | Cuyd | | \$0.00 | | \$0.00 | | \$0.00 | \$1000 / Cuyd | | \$1,000.00 | \$1,000.00 |
| 6'x7' RCB Culvert | | Cuyd | | \$0.00 | | \$0.00 | | \$0.00 | \$1000 / Cuyd | | \$1,000.00 | \$1,000.00 |
| 80 Patching conc, wall, wall penetration, non-shrink grout, 24" hole | | Cuyd | | \$0.00 | | \$0.00 | | \$0.00 | \$1000 / Cuyd | | \$1,000.00 | \$1,000.00 |
| Apron wall | 8.00 | Cuyd | | \$0.00 | | \$0.00 | | \$0.00 | \$1000 / Cuyd | | \$1,000.00 | \$1,000.00 |
| Area aggregate, crushed 3/4" stone, compacted to 9" deep | 4,148.00 | Sqyd | \$0.80 | \$3,318.40 | \$8.06 | \$33,432.88 | \$1.02 | \$4,230.96 | \$9.88 / Sqyd | | | \$40,982.24 |
| Asphalt disposal - hauling and disposal fee, 4" thick | 600.00 | Sqyd | \$1.00 | \$600.00 | \$4.70 | \$2,820.00 | \$1.32 | \$792.00 | \$7.02 / Sqyd | | | \$4,212.00 |
| Asphaltic conc pavement, pavement replacement over trench, 4" thick | 367.00 | Sqyd | \$35.00 | \$12,845.00 | \$18.00 | \$6,606.00 | \$2.98 | \$1,093.66 | \$55.98 / Sqyd | | | \$20,544.66 |
| Asphaltic conc pavement, pavement replacement over trench, 6" thick | 203.71 | Sqyd | \$44.54 | \$9,073.24 | \$27.00 | \$5,500.17 | \$3.79 | \$772.06 | \$75.33 / Sqyd | | | \$15,345.47 |
| Backfill Compaction, walk behind, vibrating roller 24" W, 6" lifts, 2 passes | 11.60 | Cuyd | \$1.72 | \$19.95 | | \$0.00 | \$0.41 | \$4.76 | \$2.13 / Cuyd | | | \$24.71 |
| Backfill, dozer backfilling no compaction | | Cuyd | \$0.80 | \$0.00 | | \$0.00 | \$1.28 | \$0.00 | \$2.08 / Cuyd | | | \$0.00 |
| Backfill, dozer backfilling, trench, no compaction | 7,300.00 | Cuyd | \$0.80 | \$5,840.00 | | \$0.00 | \$1.28 | \$9,344.00 | \$2.08 / Cuyd | | | \$15,184.00 |
| Backfill, dozer backfilling, trench, no compaction, inlet | 11.40 | Cuyd | \$0.80 | \$9.12 | | \$0.00 | \$1.28 | \$14.59 | \$2.08 / Cuyd | | | \$23.71 |
| Backfill, dozer backfilling, trench, no compaction, outlet | 10.40 | Cuyd | \$0.80 | \$8.32 | | \$0.00 | \$1.28 | \$13.31 | \$2.08 / Cuyd | | | \$21.63 |
| Backfill, dozer backfilling, trench, up to 300' haul, no compaction | 432.00 | Cuyd | \$0.80 | \$345.60 | | \$0.00 | \$1.28 | \$552.96 | \$2.08 / Cuyd | | | \$898.56 |
| Backfill, dozer backfilling, trench, up to 300' haul, no compaction, channel | 391.00 | Cuyd | \$0.80 | \$312.80 | | \$0.00 | \$1.28 | \$500.48 | \$2.08 / Cuyd | | | \$813.28 |
| Backfill, dozer backfilling, trench, up to 300' haul, no compaction, outlet | 47.00 | Cuyd | \$0.80 | \$37.60 | | \$0.00 | \$1.28 | \$60.16 | \$2.08 / Cuyd | | | \$97.76 |
| Backfill, from stockpile | 140.00 | Cuyd | \$0.60 | \$84.00 | | \$0.00 | \$0.40 | \$56.00 | \$1 / Cuyd | | | \$140.00 |
| Backfill, side slope fill | 515.00 | Cuyd | \$0.60 | \$309.00 | | \$0.00 | \$1.20 | \$619.00 | \$1.8 / Cuyd | | | \$928.00 |
| Backing Material class #1 | 67.00 | Cuyd | \$17.00 | \$1,139.00 | \$60.00 | \$4,020.00 | \$20.00 | \$1,340.00 | \$97 / Cuyd | | | \$6,499.00 |
| Backing Material, 200 Lb | 21.00 | Cuyd | \$17.00 | \$357.00 | \$60.00 | \$1,260.00 | \$20.00 | \$420.00 | \$97 / Cuyd | | | \$2,037.00 |
| Base course, large areas, crushed 3/4" stone, compacted to 12" deep | 667.00 | Sqyd | \$0.87 | \$580.29 | \$10.76 | \$7,176.92 | \$1.11 | \$740.37 | \$12.74 / Sqyd | | | \$8,497.58 |
| Base course, large areas, crushed 3/4" stone, compacted to 9" deep | 367.00 | Sqyd | \$0.80 | \$293.60 | \$8.06 | \$2,958.02 | \$1.02 | \$374.34 | \$9.88 / Sqyd | | | \$3,625.96 |
| Base course, large areas, crushed 3/4" stone, compacted to 6" deep | 378.00 | Sqyd | \$0.73 | \$275.94 | \$5.41 | \$2,044.98 | \$0.94 | \$355.32 | \$7.08 / Sqyd | | | \$2,676.24 |
| Base course, roadway, compacted to 12" deep | 667.00 | Sqyd | \$0.87 | \$580.29 | \$10.76 | \$7,176.92 | \$1.11 | \$740.37 | \$12.74 / Sqyd | | | \$8,497.58 |
| Bedding Compaction, rammer tamper, 6" to 11", 4" lifts, 2 passes | 11.60 | Cuyd | \$2.93 | \$33.99 | | \$0.00 | \$0.78 | \$9.05 | \$3.71 / Cuyd | | | \$43.04 |
| Bedding, crushed stone 3/4" to 1/2" | 420.90 | Cuyd | \$8.47 | \$3,565.02 | \$32.03 | \$13,481.43 | \$1.89 | \$795.50 | \$42.39 / Cuyd | | | \$17,841.95 |
| Bedding, crushed stone 3/4" to 1/2", inlet | 8.90 | Cuyd | \$8.47 | \$75.38 | \$32.03 | \$285.07 | \$1.89 | \$16.82 | \$42.39 / Cuyd | | | \$377.27 |
| Bedding, crushed stone 3/4" to 1/2", outlet | 47.00 | Cuyd | \$8.47 | \$398.09 | \$32.03 | \$1,505.41 | \$1.89 | \$88.83 | \$42.39 / Cuyd | | | \$1,992.33 |
| Borrow, bank measure, select granular fill, shovel, 1.5 CY bucket, 1/4 hr delivery | 380.00 | Cuyd | \$1.25 | \$475.00 | \$13.25 | \$5,035.00 | \$3.20 | \$1,216.00 | \$17.7 / Cuyd | | | \$6,726.00 |
| Building paper, polyethylene vapor barrier, std, .010" thick, berm | 28.00 | Cuyd | \$10.95 | \$306.60 | \$5.35 | \$149.80 | \$0.00 | \$0.00 | \$16.3 / Cuyd | | | \$456.40 |
| Cast -In-Place Box Girter Bridge | 5,600.00 | Sqft | | \$0.00 | | \$0.00 | | \$0.00 | \$160 / Sqft | | \$160.00 | \$160.00 |
| Catch basins or manholes, concrete, precast, 5' I.D., 8' deep | 4 | Each | \$846.67 | \$3,386.68 | \$1,475.00 | \$5,900.00 | \$189.01 | \$756.04 | \$2510.68 / Each | | | \$10,042.72 |
| Catch basins or manholes, concrete, precast, 6' I.D., 6' deep | 6.00 | Each | \$846.67 | \$5,080.02 | \$1,850.00 | \$11,100.00 | \$189.01 | \$1,134.06 | \$2885.68 / Each | | | \$17,314.08 |
| Catch basins or manholes, concrete, precast, 8' I.D., 8' deep | 1.00 | Each | \$1,587.50 | \$1,587.50 | \$3,133.31 | \$3,133.31 | \$354.40 | \$354.40 | \$5075.21 / Each | | | \$5,075.21 |
| Catch basins or manholes, steps, standard sizes, aluminum | 10.00 | Each | \$9.66 | \$96.60 | \$26.50 | \$265.00 | | \$0.00 | \$36.16 / Each | | | \$361.60 |
| Catch bsns or manholes, curb inlet FR, grate, large 24"x36" heavy dty | 12.00 | Each | \$602.88 | \$7,234.56 | \$472.04 | \$5,664.48 | | \$0.00 | \$1074.92 / Each | | | \$12,899.04 |
| Catch bsns or manholes, frs and covs, hvy traffic, 24" diam, 400 lb. | 9.00 | Each | \$162.82 | \$1,465.38 | \$260.00 | \$2,340.00 | \$36.35 | \$327.15 | \$459.17 / Each | | | \$4,132.53 |
| Catch bsns or manholes, frs and covs, hvy traffic, 36" diam, 1150 lb. | 1.00 | Each | \$423.33 | \$423.33 | \$860.00 | \$860.00 | \$94.51 | \$94.51 | \$1377.84 / Each | | | \$1,377.84 |
| CB or manholes, conc, precast, 4' ID, 6' deep | 3.00 | Each | \$549.75 | \$1,649.25 | \$1,050.00 | \$3,150.00 | \$148.32 | \$444.96 | \$1748.07 / Each | | | \$5,244.21 |
| CB or manholes, conc, slab tops, precast, 8" thick, 4' dia | 4.00 | Each | \$158.75 | \$635.00 | \$201.00 | \$804.00 | \$35.44 | \$141.76 | \$395.19 / Each | | | \$1,580.76 |
| CB or manholes, conc, slab tops, precast, 8" thick, 5' dia | 9.00 | Each | \$169.33 | \$1,523.97 | \$395.00 | \$3,555.00 | \$37.80 | \$340.20 | \$602.13 / Each | | | \$5,419.17 |
| CB or manholes, conc, slab tops, precast, 8" thick, 8' dia | 1.00 | Each | \$181.43 | \$181.43 | \$575.00 | \$575.00 | \$40.50 | \$40.50 | \$796.93 / Each | | | \$796.93 |
| CB or manholes, inverts, single channel brick, concrete | 3.00 | Each | \$144.00 | \$432.00 | \$100.00 | \$300.00 | | \$0.00 | \$244 / Each | | | \$732.00 |
| CB or manholes, inverts, triple channel, conc | 1.00 | Each | \$240.32 | \$240.32 | \$134.00 | \$134.00 | | \$0.00 | \$374.32 / Each | | | \$374.32 |
| CB/manholes, steps, heavyweight cast iron, 12" x 10-1/2", for all con | 6.00 | Each | \$9.66 | \$57.96 | \$23.00 | \$138.00 | | \$0.00 | \$32.66 / Each | | | \$195.96 |
| Cleanout | 10.00 | Each | \$1,019.00 | \$10,190.00 | \$1,560.00 | \$15,600.00 | \$249.00 | \$2,490.00 | \$2828 / Each | | | \$28,280.00 |
| Cleanouts, fir type, rnd top, xtra hvy dty, 30" pipe size | 2.00 | Each | \$791.91 | \$1,583.82 | \$1,308.00 | \$2,616.00 | | \$0.00 | \$2099.91 / Each | | | \$4,199.82 |
| Cleanouts, fir type, rnd top, xtra hvy dty, 36" pipe size | 3.00 | Each | \$791.91 | \$2,375.73 | \$1,500.00 | \$4,500.00 | | \$0.00 | \$2291.91 / Each | | | \$6,875.73 |
| Cleanouts, fir type, rnd top, xtra hvy dty, 84" pipe size | 6.00 | Each | \$2,217.00 | \$13,302.00 | \$3,659.00 | \$21,954.00 | | \$0.00 | \$5876 / Each | | | \$35,256.00 |
| Clear & grub, brush, including stumps | 0.29 | Acre | \$1,759.00 | \$510.11 | | \$0.00 | \$3,686.00 | \$1,068.94 | \$5445 / Acre | | | \$1,579.05 |
| Compaction, rammer tamper, 6" to 11", 4" lifts, 2 passes | 73.30 | Cuyd | \$2.93 | \$214.77 | | \$0.00 | \$0.78 | \$57.17 | \$3.71 / Cuyd | | | \$271.94 |
| Compaction, rammer tamper, 6" to 11", 4" lifts, backfill | 849.00 | Cuyd | \$2.93 | \$2,487.57 | | \$0.00 | \$0.78 | \$662.22 | \$3.71 / Cuyd | | | \$3,149.79 |
| Compaction, rammer tamper, 6" to 11", 4" lifts, bedding | 634.00 | Cuyd | \$2.93 | \$1,857.62 | | \$0.00 | \$0.78 | \$494.52 | \$3.71 / Cuyd | | | \$2,352.14 |
| Compaction, riding, vibrating roller, 6" lifts, side slope fill | 515.00 | Cuyd | \$2.93 | \$1,508.95 | | \$0.00 | \$0.78 | \$401.70 | \$3.71 / Cuyd | | | \$1,910.65 |
| Compaction, riding, vibrating roller, 6" lifts, fill | 9,827.00 | Cuyd | \$2.93 | \$28,793.11 | | \$0.00 | \$0.78 | \$7,665.06 | \$3.71 / Cuyd | | | \$36,458.17 |
| Compaction, struct. or trench, walk behind, vib. plate backfill channel | 391.00 | Cuyd | \$1.90 | \$742.90 | | \$0.00 | \$0.51 | \$199.41 | \$2.41 / Cuyd | | | \$942.31 |
| Compaction, struct. or trench, walk behind, vib. plate bedding channel | 167.00 | Cuyd | \$1.90 | \$317.30 | | \$0.00 | \$0.51 | \$85.17 | \$2.41 / Cuyd | | | \$402.47 |
| Compaction, struct. or trench, walk behind, vib. plate subgrade channel | 111.00 | Cuyd | \$1.90 | \$210.90 | | \$0.00 | \$0.51 | \$56.61 | \$2.41 / Cuyd | | | \$267.51 |
| Compaction, trench, walk behind, vib. plate, backfill | 2,916.70 | Cuyd | \$1.90 | \$5,541.73 | | \$0.00 | \$0.51 | \$1,487.52 | \$2.41 / Cuyd | | | \$7,029.25 |
| Compaction, trench, walk behind, vib. plate, backfill outlet | 277.00 | Cuyd | \$1.90 | \$526.30 | | \$0.00 | \$0.51 | \$141.27 | \$2.41 / Cuyd | | | \$667.57 |
| Compaction, trench, walk behind, vib. plate, bedding | 1,845.50 | Cuyd | \$1.90 | \$3,506.45 | | \$0.00 | \$0.51 | \$941.21 | \$2.41 / Cuyd | | | \$4,447.66 |
| Compaction, trench, walk behind, vib. plate, bedding, inlet | 11.60 | Cuyd | \$1.90 | \$22.04 | | \$0.00 | \$0.51 | \$5.92 | \$2.41 / Cuyd | | | \$27.96 |
| Compaction, trench, walk behind, vib. plate, bedding, outlet | 41.00 | Cuyd | \$1.90 | \$77.90 | | \$0.00 | \$0.51 | \$20.91 | \$2.41 / Cuyd | | | \$98.81 |
| Compaction, trench, walk behind, vib. plate, inlet | 10.20 | Cuyd | \$1.90 | \$19.38 | | \$0.00 | \$0.51 | \$5.20 | \$2.41 / Cuyd | | | \$24.58 |
| Compaction, trench, walk behind, vib. plate, outlet | 9.30 | Cuyd | \$1.90 | \$17.67 | | \$0.00 | \$0.51 | \$4.74 | \$2.41 / Cuyd | | | \$22.41 |
| Compaction, trench, walk behind, vib. plate, subgrade | 277.80 | Cuyd | \$1.90 | \$527.82 | | \$0.00 | \$0.51 | \$141.68 | \$2.41 / Cuyd | | | \$669.50 |
| Compaction, trench, walk behind, vib. plate, subgrade outlet | 5.00 | Cuyd | \$1.90 | \$9.50 | | \$0.00 | \$0.51 | \$2.55 | \$2.41 / Cuyd | | | \$12.05 |
| Compaction, trench, walk behind, vib. plate, subgrade, inlet | 1.30 | Cuyd | \$1.90 | \$2.47 | | \$0.00 | \$0.51 | \$0.66 | \$2.41 / Cuyd | | | \$3.13 |
| Compaction, trench, walk behind, vib. plate, subgrade, outlet | 32.00 | Cuyd | \$1.90 | \$60.80 | | \$0.00 | \$0.51 | \$16.32 | \$2.41 / Cuyd | | | \$77.12 |
| Compaction, trench, walk behind, vib., Plate | 5,800.00 | Cuyd | \$1.90 | \$11,020.00 | | \$0.00 | \$0.51 | \$2,958.00 | \$2.41 / Cuyd | | | \$13,978.00 |
| Compaction, vibratory plate, 8" lifts, common fill | 423.00 | Cuyd | \$1.90 | \$803.70 | | \$0.00 | \$0.51 | \$215.73 | \$2.41 / Cuyd | | | \$1,019.43 |
| Compaction, vibratory plate, 8" lifts, select fill, bedding | 32.00 | Cuyd | \$1.90 | \$60.80 | | \$0.00 | \$0.51 | \$16.32 | \$2.41 / Cuyd | | | \$77.12 |
| Compaction, walk behind, vibrating pl 18" w, 12" lifts, 4 passes, subgrade | 119.00 | Cuyd | \$1.90 | \$226.10 | | \$0.00 | \$0.51 | \$60.69 | \$2.41 / Cuyd | | | \$286.79 |
| Compaction, walk behind, vibrating pl 18" wide, 12" lifts, 4 passes | 1,638.00 | Cuyd | \$1.90 | \$3,112.20 | | \$0.00 | \$0.51 | \$835.38 | \$2.41 / Cuyd | | | \$3,947.58 |
| Compaction, walk behind, vibrating plate 18" wide, backfill | 269.00 | Cuyd | \$1.90 | \$511.10 | | \$0.00 | \$0.51 | \$137.19 | \$2.41 / Cuyd | | | \$648.29 |
| Compaction, walk behind, vibrating plate 18" wide, bedding | 50.00 | Cuyd | \$1.90 | \$95.00 | | \$0.00 | \$0.51 | \$25.50 | \$2.41 / Cuyd | | | \$120.50 |
| Compaction, walk behind, vibrating plate 18" wide, subgrade | 185.00 | Cuyd | \$1.90 | \$351.50 | | \$0.00 | \$0.51 | \$94.35 | \$2.41 / Cuyd | | | \$445.85 |
| Compaction, walk behind, vibrating roller 24" W, 6" lifts, 2 passes | 440.00 | Cuyd | \$1.90 | \$836.00 | | \$0.00 | \$0.51 | \$224.40 | \$2.41 / Cuyd | | | \$1,060.40 |
| Concrete Structure (Conceptual) Headwall | 18.00 | Cuyd | | \$0.00 | | \$0.00 | | \$0.00 | \$1000 / Cuyd | | \$1,000.00 | \$1,000.00 |
| Concrete Structure (Conceptual) Open Baffle Box | 7.00 | Cuyd | | \$0.00 | | \$0.00 | | \$0.00 | \$1000 / Cuyd | | \$1,000.00 | \$1,000.00 |
| Concrete, ready mix, regular weight, 4000 psi | 74.00 | Cuyd | | \$0.00 | \$120.00 | \$8,880.00 | | \$0.00 | \$120 / Cuyd | | | \$8,880.00 |
| Culvert, outlet | 34.00 | Cuyd | | \$0.00 | | \$0.00 | | \$0.00 | \$1000 / Cuyd | | \$1,000.00 | \$1,000.00 |
| Disposal fee | 2.00 | Trk | | \$0.00 | | \$0.00 | | \$0.00 | \$105 / Trk | | \$105.00 | \$105.00 |
| Dump Charge, typical urban city, fees only, bldg constr mat'ls | 801.00 | Ton | | \$0.00 | | \$0.00 | | \$0.00 | \$33 / Ton | | \$33.00 | \$33.00 |
| Elevated slab | 32.00 | Cuyd | | \$0.00 | | \$0.00 | | \$0.00 | \$1000 / Cuyd | | \$1,000.00 | \$1,000.00 |
| Erosion control allowance: | 1.00 | Lsum | | \$0.00 | | \$0.00 | | \$0.00 | \$2614 / Lsum | | \$2,614.00 | \$2,614.00 |
| Erosion control allowance: small site: silt fence, bio bags, no special | 1.00 | Lsum | | \$0.00 | | \$0.00 | | \$0.00 | \$1536 / Lsum | | \$1,536.00 | \$ |

| Item Description | Quantity | Unit | Labor \$/Unit | Labor Amount | Materials \$/Unit | Materials Amount | Equip \$/Unit | Equip Amount | Total \$/Unit | Subs Amount | Other Amount | Grand Total |
|---|-----------|------|------------------|-----------------|----------------------|---------------------|------------------|-----------------|------------------|----------------|-----------------|----------------|
| Junction structure manholes, concrete, precast, 8' I.D., 8' deep, | 1.00 | Each | \$1,587.50 | \$1,587.50 | \$3,133.31 | \$3,133.31 | \$354.40 | \$354.40 | \$5075.21 / Each | | | \$5,075.21 |
| Landscaping Allowance | 1.00 | Lsum | | \$0.00 | | \$0.00 | | \$0.00 | \$5000 / Lsum | \$5,000.00 | | \$5,000.00 |
| Landscaping Allowance: | 1.00 | Lsum | | \$0.00 | | \$0.00 | | \$0.00 | \$500 / Lsum | \$500.00 | | \$500.00 |
| Landscaping Allowance:: | 1.00 | Lsum | | \$0.00 | | \$0.00 | | \$0.00 | \$30000 / Lsum | | \$30,000.00 | \$30,000.00 |
| Lines on pvmr, acrylic waterborne, white or yellow, 4" wide | 925 | Lnft | \$0.12 | \$111.00 | \$0.17 | \$157.25 | \$0.08 | \$74.00 | \$0.37 / Lnft | | | \$342.25 |
| Loading Trucks, F.E. Loader, 3 C.Y., concrete | 93.00 | Cuyd | \$0.74 | \$68.82 | | \$0.00 | \$1.24 | \$115.32 | \$1.98 / Cuyd | | | \$184.14 |
| Loading Trucks, F.E. Loader, 3 C.Y., | 616.00 | Cuyd | \$0.74 | \$455.84 | | \$0.00 | \$1.24 | \$763.84 | \$1.98 / Cuyd | | | \$1,219.68 |
| Loading Trucks, F.E. Loader, 3 C.Y.,, channel | 499.00 | Cuyd | \$0.74 | \$369.26 | | \$0.00 | \$1.24 | \$618.76 | \$1.98 / Cuyd | | | \$988.02 |
| Loading Trucks, F.E. Loader, 3 C.Y.,, clear & grub | 237.00 | Cuyd | \$0.74 | \$175.38 | | \$0.00 | \$1.24 | \$293.88 | \$1.98 / Cuyd | | | \$469.26 |
| Loading Trucks, F.E. Loader, 3 C.Y.,, concrete | 23.00 | Cuyd | \$0.74 | \$17.02 | | \$0.00 | \$1.24 | \$28.52 | \$1.98 / Cuyd | | | \$45.54 |
| Loading Trucks, F.E. Loader, 3 C.Y.,, outlet | 93.00 | Cuyd | \$0.74 | \$68.82 | | \$0.00 | \$1.24 | \$115.32 | \$1.98 / Cuyd | | | \$184.14 |
| Loading Trucks, F.E. Loader, 3 C.Y.,, stockpile | 140.00 | Cuyd | \$0.74 | \$103.60 | | \$0.00 | \$1.24 | \$173.60 | \$1.98 / Cuyd | | | \$277.20 |
| Misc metals, allowance | 1.00 | Lsum | | \$0.00 | | \$0.00 | | \$0.00 | \$500 / Lsum | | \$500.00 | \$500.00 |
| Painting lines, thermoplastic, white or yellow, 6" wide | 204.00 | Lnft | \$0.14 | \$28.56 | | \$0.00 | \$0.00 | \$0.00 | \$0.14 / Lnft | | | \$28.56 |
| Patching conc, wall, wall penetration, non-shrink grout, | 8 | Each | \$75.38 | \$603.04 | \$286.20 | \$2,289.60 | | \$0.00 | \$361.58 / Each | | | \$2,892.64 |
| Patching conc, wall, wall penetration, non-shrink grout, 24" hole | 2 | Each | \$79.82 | \$159.64 | \$238.50 | \$477.00 | | \$0.00 | \$318.32 / Each | | | \$636.64 |
| Patching conc, wall, wall penetration, non-shrink grout, 30" hole | 8 | Each | \$75.38 | \$603.04 | \$238.50 | \$1,908.00 | | \$0.00 | \$313.88 / Each | | | \$2,511.04 |
| Patching conc, wall, wall penetration, non-shrink grout, 42" hole | 18.00 | Each | \$79.20 | \$1,425.60 | \$240.00 | \$4,320.00 | | \$0.00 | \$319.2 / Each | | | \$5,745.60 |
| Piping, drainage & sewage, RCP, class 3, no gaskets, 18" dia | 275.00 | Lnft | \$18.85 | \$5,183.75 | \$32.00 | \$8,800.00 | \$2.18 | \$599.50 | \$53.03 / Lnft | | | \$14,583.25 |
| Piping, drainage & sewage, RCP, class 3, no gaskets, 24" dia | 900.00 | Lnft | \$24.50 | \$22,050.00 | \$35.00 | \$31,500.00 | \$2.84 | \$2,556.00 | \$62.34 / Lnft | | | \$56,106.00 |
| Piping, drainage & sewage, RCP, class 3, no gaskets, 30" dia | 925 | Lnft | \$32.48 | \$30,044.00 | \$43.00 | \$39,775.00 | \$3.22 | \$2,978.50 | \$78.7 / Lnft | | | \$72,797.50 |
| Piping, drainage & sewage, RCP, class 3, no gaskets, 36" dia | 550.00 | Lnft | \$39.70 | \$21,835.00 | \$73.00 | \$40,150.00 | \$3.94 | \$2,167.00 | \$116.64 / Lnft | | | \$64,152.00 |
| Piping, drainage & sewage, RCP, class 3, no gaskets, 39" dia | 800.00 | Lnft | \$39.70 | \$31,760.00 | \$78.00 | \$62,400.00 | \$3.94 | \$3,152.00 | \$121.64 / Lnft | | | \$97,312.00 |
| Piping, drainage & sewage, RCP, class 3, no gaskets, 42" dia | 1,600.00 | Lnft | \$39.70 | \$63,520.00 | \$95.00 | \$152,000.00 | \$3.94 | \$6,304.00 | \$138.64 / Lnft | | | \$221,824.00 |
| Piping, drainage & sewage, RCP, class 3, no gaskets, 48" dia | 800.00 | Lnft | \$44.66 | \$35,728.00 | \$120.00 | \$96,000.00 | \$4.43 | \$3,544.00 | \$169.09 / Lnft | | | \$135,272.00 |
| Piping, drainage & sewage, RCP, class 3, no gaskets, 66" dia | 150.00 | Lnft | \$71.46 | \$10,719.00 | \$250.00 | \$37,500.00 | \$7.09 | \$1,063.50 | \$328.55 / Lnft | | | \$49,282.50 |
| Piping, drainage & sewage, RCP, class 3, no gaskets, 72" dia | 8.00 | Lnft | \$71.46 | \$571.68 | \$275.00 | \$2,200.00 | \$7.09 | \$56.72 | \$353.55 / Lnft | | | \$2,828.40 |
| Piping, drainage & sewage, RCP, class 3, no gaskets, 84" dia | 3,600.00 | Lnft | \$125.05 | \$450,180.00 | \$300.00 | \$1,080,000.00 | \$12.40 | \$44,640.00 | \$437.45 / Lnft | | | \$1,574,820.00 |
| Piping, drainage & sewage, RCP, class 3, no gaskets, 90" dia | 600.00 | Lnft | \$125.05 | \$75,030.00 | \$450.00 | \$270,000.00 | \$12.40 | \$7,440.00 | \$587.45 / Lnft | | | \$352,470.00 |
| Piping, storm drain, CMP, plain, 20' lengths, 24" dia, 14 ga | 24.00 | Lnft | \$14.00 | \$336.00 | \$17.62 | \$422.88 | \$1.62 | \$38.88 | \$33.24 / Lnft | | | \$797.76 |
| Piping, water dist, conc pipe, gasket, 18" dia | 100.00 | Each | \$3.14 | \$314.00 | \$4.50 | \$450.00 | | \$0.00 | \$7.64 / Each | | | \$764.00 |
| Piping, water dist, conc pipe, gasket, 24" dia | 70.00 | Each | \$3.14 | \$219.80 | \$4.75 | \$332.50 | | \$0.00 | \$7.89 / Each | | | \$552.30 |
| Piping, water dist, conc pipe, gasket, 30" dia | 70 | Each | \$3.14 | \$219.80 | \$6.00 | \$420.00 | | \$0.00 | \$9.14 / Each | | | \$639.80 |
| Piping, water dist, conc pipe, gasket, 36" dia | 55.00 | Each | \$3.14 | \$172.70 | \$6.50 | \$357.50 | | \$0.00 | \$9.64 / Each | | | \$530.20 |
| Piping, water dist, conc pipe, gasket, 39" dia | 80.00 | Each | \$3.14 | \$251.20 | \$9.20 | \$736.00 | | \$0.00 | \$12.34 / Each | | | \$987.20 |
| Piping, water dist, conc pipe, gasket, 42" dia | 123.00 | Each | \$3.14 | \$386.22 | \$9.50 | \$1,168.50 | | \$0.00 | \$12.64 / Each | | | \$1,554.72 |
| Piping, water dist, conc pipe, gasket, 48" dia | 61.00 | Each | \$3.14 | \$191.54 | \$10.00 | \$610.00 | | \$0.00 | \$13.14 / Each | | | \$801.54 |
| Piping, water dist, conc pipe, gasket, 72" dia | 46.00 | Each | \$3.14 | \$144.44 | \$36.00 | \$1,656.00 | | \$0.00 | \$39.14 / Each | | | \$1,800.44 |
| Piping, water dist, conc pipe, gasket, 90" dia | 46.00 | Each | \$3.14 | \$144.44 | \$36.00 | \$1,656.00 | | \$0.00 | \$39.14 / Each | | | \$1,800.44 |
| Placing conc, incl vib, slab on grade, 6" thick, pumped | 74.00 | Cuyd | \$17.45 | \$1,291.30 | | \$0.00 | \$5.56 | \$411.44 | \$23.01 / Cuyd | | | \$1,702.74 |
| Placing conc, incl vib, slab on grade, pumped, channel | 59.00 | Cuyd | \$17.45 | \$1,029.55 | | \$0.00 | \$5.56 | \$328.04 | \$23.01 / Cuyd | | | \$1,357.59 |
| Placing conc, incl vib, walls, 8" thick, pumped | 74.00 | Cuyd | \$32.28 | \$2,388.72 | | \$0.00 | \$10.28 | \$760.72 | \$42.56 / Cuyd | | | \$3,149.44 |
| Placing conc, incl vib, walls, pumped, channel | 45.00 | Cuyd | \$32.28 | \$1,452.60 | | \$0.00 | \$10.28 | \$462.60 | \$42.56 / Cuyd | | | \$1,915.20 |
| Pot Holing - pipe lines | 28.00 | Each | \$250.00 | \$7,000.00 | | \$0.00 | \$35.00 | \$980.00 | \$285 / Each | | | \$7,980.00 |
| Pot Holing - pipe lines: 2 per 100' | 32.00 | Each | \$250.00 | \$8,000.00 | | \$0.00 | \$35.00 | \$1,120.00 | \$285 / Each | | | \$9,120.00 |
| Pre-cast concrete wall penetration, non-shrink grout, 24" hole | 8.00 | Each | \$75.00 | \$600.00 | \$108.00 | \$864.00 | | \$0.00 | \$183 / Each | | | \$1,464.00 |
| Pre-cast concrete wall penetration, non-shrink grout, 42" hole | 18.00 | Each | \$100.00 | \$1,800.00 | \$240.00 | \$4,320.00 | | \$0.00 | \$340 / Each | | | \$6,120.00 |
| Process Equipment - Vortech Precast | 1.00 | Each | \$3,850.00 | \$3,850.00 | \$50,400.00 | \$50,400.00 | | \$0.00 | \$54250 / Each | | | \$54,250.00 |
| Railing, pipe, aluminum, 3 rail, clear anodized | 272.00 | Lnft | \$15.67 | \$4,262.24 | \$45.95 | \$12,498.40 | \$0.96 | \$261.12 | \$81.58 / Lnft | | \$19.00 | \$17,040.76 |
| Rent crane truck mounted, hydraulic, 55 ton | 45.00 | Day | | \$0.00 | | \$0.00 | \$990.00 | \$44,550.00 | \$41562 / Day | \$40,572.00 | | \$85,122.00 |
| Rent crane truck mounted, hydraulic, 55 ton capacity | 30.00 | Day | | \$0.00 | | \$0.00 | \$990.00 | \$29,700.00 | \$28038 / Day | \$27,048.00 | | \$56,748.00 |
| Rent crane truck mounted, hydraulic, 55 ton capacity - Type B | 1.00 | Day | | \$0.00 | | \$0.00 | \$990.00 | \$990.00 | \$1891.6 / Day | \$901.60 | | \$1,891.60 |
| Retaining wall | 25.00 | Cuyd | | \$0.00 | | \$0.00 | | \$0.00 | \$1000 / Cuyd | | \$1,000.00 | \$1,000.00 |
| Rip-rap, energy dissipater | 120.00 | Sqyd | \$55.00 | \$6,600.00 | \$25.00 | \$3,000.00 | \$18.70 | \$2,244.00 | \$98.7 / Sqyd | | | \$11,844.00 |
| Rip-rap, gabions, galv steel mesh boxes, stone filled | 100.00 | Cuyd | \$49.95 | \$4,995.00 | \$60.56 | \$6,056.00 | \$16.44 | \$1,644.00 | \$126.95 / Cuyd | | | \$12,695.00 |
| Rip-rap, gabions, galv steel mesh boxes, stone filled, 36" deep | 100.00 | Cuyd | \$49.95 | \$4,995.00 | \$60.56 | \$6,056.00 | \$16.44 | \$1,644.00 | \$126.95 / Cuyd | | | \$12,695.00 |
| Rip-rap, mach placed for slip protec, 18" min thick. not grouted | 618.00 | Sqyd | \$56.55 | \$34,947.90 | \$49.55 | \$30,621.90 | \$12.33 | \$7,619.94 | \$118.43 / Sqyd | | | \$73,189.74 |
| Rip-rap, mach placed for slip protec, 18" min thick. not grouted | 1,334.00 | Sqyd | \$56.55 | \$75,437.70 | \$49.55 | \$66,099.70 | \$12.33 | \$16,448.22 | \$118.43 / Sqyd | | | \$157,985.62 |
| Rip-rap, machine placed for slope prot, 3/8 to 1/4 CY pieces | 52.00 | Cuyd | \$37.46 | \$1,947.92 | \$49.55 | \$2,576.60 | \$12.33 | \$641.16 | \$99.34 / Cuyd | | | \$5,165.68 |
| RT, 0.4 lds/hr and disposal fee | | Each | | \$0.00 | | \$0.00 | | \$0.00 | \$0 / Each | | | \$0.00 |
| Saw cutting, asphalt, after 3" deep; each addl inch of depth | 1,112.00 | Lnft | \$0.82 | \$911.84 | \$0.30 | \$333.60 | \$0.44 | \$489.28 | \$1.56 / Lnft | | | \$1,734.72 |
| Saw cutting, asphalt, up to 3" deep | 1,112.00 | Lnft | \$0.48 | \$533.76 | \$0.07 | \$77.84 | \$0.26 | \$289.12 | \$0.81 / Lnft | | | \$900.72 |
| Sheet piling, steel, no wales, 15' excav., drive, extract & salvage | 1,320.00 | Sqft | \$14.03 | \$18,519.60 | \$11.41 | \$15,061.20 | \$10.60 | \$13,992.00 | \$36.04 / Sqft | | | \$47,572.80 |
| Sidewalks, conc, 3000 PSI, CIP w/ 6x6 mesh, broom fin, no basem 4" T | 544.00 | Sqft | \$2.01 | \$1,093.44 | \$1.45 | \$788.80 | \$0.00 | \$0.00 | \$3.46 / Sqft | | | \$1,882.24 |
| Sidewalks, conc, 3000 PSI, for bank run gravel base, 4" thick, add | 544.00 | Sqft | \$0.47 | \$255.68 | \$0.42 | \$228.48 | \$0.04 | \$21.76 | \$0.93 / Sqft | | | \$505.92 |
| Site demo, Area vegetation removal | 1.14 | Acre | \$1,758.00 | \$2,004.12 | | \$0.00 | \$3,692.00 | \$4,208.88 | \$5450 / Acre | | | \$6,213.00 |
| Site dml, conc7" to 24" thick, rod reinforced | 23.00 | Cuyd | \$92.56 | \$2,128.88 | | \$0.00 | \$61.09 | \$1,405.07 | \$153.65 / Cuyd | | | \$3,533.95 |
| Site dml, no hauling, pavement removal, bit, 4" thk | 130.00 | Sqyd | \$5.29 | \$687.70 | | \$0.00 | \$3.49 | \$453.70 | \$8.78 / Sqyd | | | \$1,141.40 |
| Site dml, no hauling, pavement removal, bit, 4" to 6" thick | 1,072.00 | Sqyd | \$5.29 | \$5,670.88 | | \$0.00 | \$3.49 | \$3,741.28 | \$8.78 / Sqyd | | | \$9,412.16 |
| Slab on Grade | 28.00 | Cuyd | | \$0.00 | | \$0.00 | \$0.00 | \$0.00 | \$1000 / Cuyd | | \$1,000.00 | \$1,000.00 |
| Slab on Grade for roadway | 202.00 | Cuyd | | \$0.00 | | \$0.00 | \$0.00 | \$0.00 | \$1000 / Cuyd | | \$1,000.00 | \$1,000.00 |
| Slope Landscaping/irrigation | 59,000.00 | Sqft | | \$0.00 | | \$0.00 | | \$0.00 | \$29500 / Sqft | \$29,500.00 | | \$29,500.00 |
| Soil stabilization, geotextile fabric, woven, H.D., 600 lb. tensile st | 290.00 | Sqyd | \$0.32 | \$92.80 | \$1.85 | \$536.50 | | \$0.00 | \$2.17 / Sqyd | | | \$629.30 |
| Struct stl, WF, W 36 x 170 | 270.00 | Lnft | \$4.66 | \$1,258.20 | \$192.44 | \$51,958.80 | \$1.87 | \$504.90 | \$198.97 / Lnft | | | \$53,721.90 |
| Struct stl, WF, W 36 x 171 | 270.00 | Lnft | \$4.66 | \$1,258.20 | \$192.44 | \$51,958.80 | \$1.87 | \$504.90 | \$198.97 / Lnft | | | \$53,721.90 |
| Subgrade Compaction, rammer tamper, 6" to 11", 4" lifts, 2 passes | 11.60 | Cuyd | \$2.93 | \$33.99 | | \$0.00 | \$0.78 | \$9.05 | \$3.71 / Cuyd | | | \$43.04 |
| Traffic Control Allowance | 1.00 | Lsum | | \$0.00 | | \$0.00 | | \$0.00 | \$30000 / Lsum | | \$30,000.00 | \$30,000.00 |
| Traffic Control Allowance: | 1.00 | Lsum | | \$0.00 | | \$0.00 | | \$0.00 | \$500 / Lsum | | \$500.00 | \$500.00 |
| Traffic Control Allowance: 2 flaggers, 15' pipe/hr | 1.00 | Lsum | | \$0.00 | | \$0.00 | | \$0.00 | \$4878 / Lsum | | \$4,878.00 | \$4,878.00 |
| Trench box, 7200 lbs, 6'x 20' | 12.00 | Day | | \$0.00 | | \$0.00 | \$141.60 | \$1,699.20 | \$141.6 / Day | | | \$1,699.20 |
| Trench box, 9500 lbs, 8'x 20' | 20.00 | Day | | \$0.00 | | \$0.00 | \$240.00 | \$4,800.00 | \$240 / Day | | | \$4,800.00 |
| Trench Plates allowance | 1.00 | Mo | | \$0.00 | | \$0.00 | \$900.00 | \$900.00 | \$900 / Mo | | | \$900.00 |
| Underground tape, detectable aluminum, 2" | 9 | Clf | \$2.34 | \$21.06 | \$3.06 | \$27.54 | | \$0.00 | \$5.4 / Clf | | | \$48.60 |
| Wall, bridge | 120 | Cuyd | | \$0.00 | | \$0.00 | | \$0.00 | \$1000 / Cuyd | | \$1,000.00 | \$1,000.00 |
| Water unit | 1628 | Gal | \$0.70 | \$1,139.60 | \$1.05 | \$1,709.40 | | \$0.00 | \$1.75 / Gal | | | \$2,849.00 |
| Welded wire fabric, 10/10 gage, SOG | 20 | Csf | \$36.61 | \$732.20 | \$29.41 | \$588.20 | | \$0.00 | \$66.02 / Csf | | | \$1,320.40 |
| Welded wire fabric, 10/10 gage, Walls | 60 | Csf | \$36.61 | \$2,196.60 | \$29.41 | \$1,764.60 | | \$0.00 | \$66.02 / Csf | | | \$3,961.20 |
| Welded wire fabric, sheets, 4 x 4 - W4 x W4 (4 x 4), 85 lb/CSF, channel | 12 | Csf | \$36.61 | \$439.32 | \$29.41 | \$352.92 | | \$0.00 | \$66.02 / Csf | | | \$792.24 |
| Wing wall for 7'X11' box culvert | 9.15 | Cuyd | | \$0.00 | | \$0.00 | | \$0.00 | \$1000 / Cuyd | | \$1,000.00 | \$1,000.00 |
| Wingwall | 1 | Lsum | | \$0.00 | | \$0.00 | \$0.00 | \$0.00 | \$154850 / Lsum | | \$154,850.00 | \$154,850.00 |